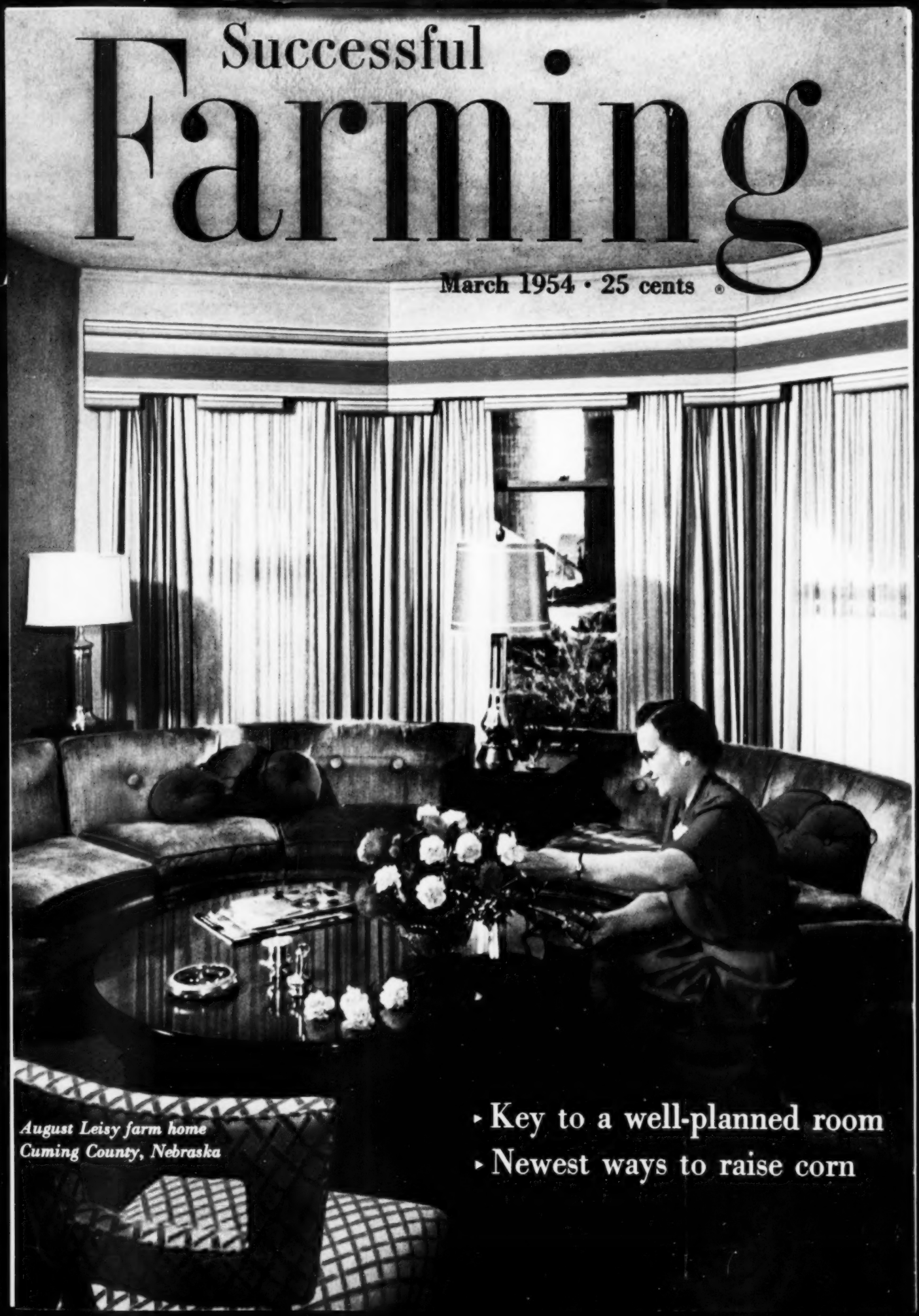
Successful Farming

March 1954 · 25 cents

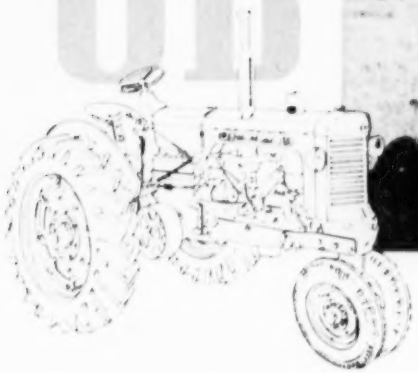


August Leisy farm home
Cuming County, Nebraska

- Key to a well-planned room
- Newest ways to raise corn

MINNEAPOLIS-MOLINE

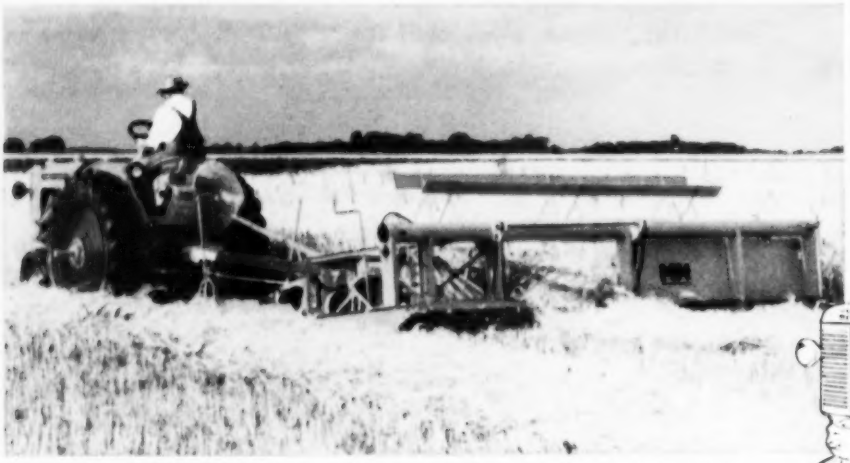
UB



Hitch this 4-bottom MM Hi-Klearance plow to the new UB tractor and count your savings in time, fuel, and a better job done! "New car" driving ease, Uni-Matic hydraulic implement control, and a big reserve of high-compression 4-plow power make tough field jobs a cinch. A choice of gasoline or LP gas models lets you farm with *your* lowest cost fuel . . . boosts your savings every hour you work.

WORK-TEST THESE NEW TRACTORS AND SEE WHY THEY'RE AHEAD!

3-plow ZB and 4-plow UB tractors take a big, NEW cut at farming costs!



MINNEAPOLIS-MOLINE

ZB

Zip through field work when every hour means extra money in your pocket. You handle bigger-than-2-plow jobs with new speed and ease when you drive the powerful new Model ZB. Balanced weight to power gives you firm, sure traction . . . full 3-plow lugging on any ground. Live power take-off (optional on both ZB and UB tractors) lets you slow up or stop the tractor, and still keep your windrower, corn picker, forage harvestor or combine running at a constant speed.

3 front end types to fit your farm . . . your crops!

TYPE U
Dual front wheels

TYPE N
Single front wheel

TYPE E
Wide adjustable front wheels

Ask your MM dealer to show you right on your own farm, how much more these new MM tractors can do!

MINNEAPOLIS-MOLINE MINNEAPOLIS 1, MINN.

MINNEAPOLIS MOLINE MM MODERN MACHINERY

NOW—the NEW
IMPROVED SURE-GRIP D-15

by GOODYEAR

Up to 18% Deeper Lugs for Greater Pull, Longer Wear

✔ Check All the Features That Make the Improved Sure-Grip D-15 The Best Worker—The Longest Wearer—at This Low Price

- **HEAVIER SHOULDERS,** buttressed for rugged durability!
- **FLATTER TREAD** "gears" better with soil, works and wears evenly, rolls smoothly in field or on road!
- **O-P-E-N C-E-N-T-E-R,** made famous by Goodyear, gives deeper, stronger bite, makes treads self-cleaning!
- **STRONGER BODY** for longer life, for better relugging!
- **RULER-STRAIGHT LUGS** take full-length grip and p-u-l-l where other tires spin helplessly!

NO INCREASE IN COST! See them at your helpful Goodyear dealer's NOW! Goodyear, Farm Tire Dept., Akron 16, Ohio.

Sure-Grip—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

*List price at time of printing—subject to change without notice.

The Plain Truth about Today's Motor Oils

HD (High Detergency) Motor Oils are recommended for many of today's newer cars.

These oils contain additives... to help keep your engine clean, prevent rust deposits, do many useful jobs.

But additives, in themselves, do not lubricate.

They can be added to any oil.

To very good oil.

To very poor oil.

The quality of the basic oil is what determines the kind of lubrication your motor gets.

That's why...

Today's BEST oils start with Nature's BEST crude

Pennsylvania Motor Oils are endowed with outstanding natural toughness.

Skillfully refined from Nature's best crude oil *and fortified by carefully selected additives,* they stand up longer against the demands of modern engines.

Keep the power you bought

***INSIST* on a brand of**

PENNSYLVANIA Motor Oil

100% PURE PENNSYLVANIA OIL

PENNSYLVANIA GRADE CRUDE OIL ASSOCIATION
Oil City, Pennsylvania

Successful Farming®

THE MAGAZINE OF FARM BUSINESS AND FARM HOMES

March, 1954 Vol. 52, No. 3

Management and Business

Farm outlook ... 6
Friend to friend ... 8
Farm news of the month ... 15
The farmer's Washington ... 18
Steps to better banking ... 22
The dairy support problem ... 42
Why farm half the county? ... 45
We'll try to write the bill farmers want ... 50
Here's what we want ... 51
How to borrow money ... 152

Herds, Flocks, Crops

Don't blame antibiotics for too-fat hogs ... 36
What to do about TGE ... 38
Stick it out till pasture comes ... 46
Get spring pasture—quick ... 46
Our 8 newest ways to raise corn ... 52
He swaps grass for half the grain ... 58
Report on green-lot feeding ... 60
Leaving pigs on sows too long? ... 61
Poultry pointers ... 78
Infrared brooding ... 82
Do your pigs really have scours? ... 84
Tips for dairymen ... 96
How to break a heifer to milk ... 98
Easy brush clearing ... 102
Livestock news ... 114
Why sows dry up ... 148
Soils and crops ... 162
Veterinary helps ... 178

Farm Building and Machinery

What's new in farming ... 10
Don't break your back with a basket ... 62
How to wire a 3-way switch ... 70
Low-cost hog shelter ... 88
Successful shortcuts ... 118
Cartridge-powered tools ... 130
Work over your harrow—now ... 133
How to repair your disc harrow ... 138
Build a walk-in freezer ... 166
Treadle-type sprayer ... 176
All around the farm ... 188

Successful Homemaking

All around the house ... 24
What's new in homemaking ... 32
17 spring-timely ideas ... 48
It's time for supper ... 54
Good furniture arrangement ... 56
How to welcome washday ... 64
So good with cheese ... 67
Pancakes and waffles ... 68
Grandma's cupboard goes modern ... 80
Use a tailor's ham ... 101
Delicious pork recipes ... 104
For the short, full figure ... 124
A lampshade you can make ... 134
What's going into your washtub? ... 144
Tips for the cook ... 146
Save that chair ... 156
Frostings—six of the best ... 170
Easy way to iron a pair of pants ... 180
Home planning helps ... 182

Family Life and Fun

Feel better by eating better ... 30
Let a home pasteurizer protect your family's health ... 35
The playhouse ... 90
Laughing at life ... 122
How we took the cover ... 160

E. T. Meredith, Founder, 1876-1928
Fred Bohen, President
E. T. Meredith, Jr., Vice-President and General Manager
Lester H. Mugge, Vice-President and Director of Circulation
Edwin L. Sullivan, Vice-President and Director of Advertising

Kirk Fox, Editor — Jim Roe, Managing Editor
Dick Hanson, Vernon Schneider, George D. Johnson, Elizabeth Page, Maurine Harris, Betty Fisk, Associate Editors;
S. S. DeForest, Wayne E. Swegle, Claire Miller, Helen Stark (New York), Assistant Editors; Stan Geiser, Bill Clothier, Marjorie Jacobson, Editorial Assistants; Barbara Stuart, Betty Grayson, Field Editors;
Edgar M. Young, Production Editor
Bert Dieter, Art Director — Earl K. Larson, Art Editor
Frank Mathews, Assistant
C. W. Howe, Manager of Meredith Farms

Successful Farming guarantees money back or replacement if you buy any article of merchandise that is not as advertised therein.

Subscription Correspondence: Any questions concerning subscriptions can be answered more quickly if accompanied by an address label clipped from a recent copy. **Rates:** New and renewal subscriptions, one year $1.50 in the United States and possessions, Canada, and Pan-American countries. Other countries $2 per year. Any time you are not satisfied, your money will be cheerfully refunded. For continuous service, a renewal must reach us at least 30 days before expiration of the old subscription. **Change of Address:** Five weeks' notice is required. Please report any change of address to *Successful Farming*, Des Moines 3, Iowa, rather than through your local post office. Send OLD address as well as the NEW, enclosing an address label clipped from the cover of a recent copy. Entered as second-class matter October, 1902, at the post office in Des Moines, Iowa, under act of Congress, March 3, 1879. Edition A.

Copyright, 1954, by Meredith Publishing Company. All rights reserved under the International and Pan-American Conventions.

Published monthly by Meredith Publishing Company, 1716 Locust St., Des Moines 3, Iowa. Printed in U.S.A.

Furrows are fine on the brows of hills...

. . . but not on the brows of men, when the furrows are put there by worry.

There are some worries a farmer can't very well escape . . . droughts, floods and other season-to-season hazards of his business.

But there are others, concerning the long-range future of his farm, his family and himself, which a man can get rid of—through life insurance.

The New York Life agent in your county is well experienced in putting men's minds at ease. He can show you how a well-planned life insurance program, worked out in time, can provide financial security for your wife, funds for the education of your children, or retirement income for your own later years. Why not get in touch with him today—and keep the furrows off your forehead?

NEW YORK LIFE
INSURANCE COMPANY
51 Madison Avenue, New York 10, N. Y.

THE NEW YORK LIFE AGENT IN YOUR COUNTY IS A GOOD MAN TO KNOW

New York Life, a mutual company, pays dividends to policyholders only. It is one of the strongest legal reserve companies in the world

Farm Outlook

Latest information on conditions, production, markets, and income prospects

Second wind for our economy

The nation's economy now is like a man catching his second breath. The economy has been sprinting. Now it has slowed for a steadier run. Both industry and agriculture are readjusting production this year.

In industry: Fewer autos and less farm machinery will roll off the assembly lines. Fewer houses will be built. Production of practically all manufactured goods will be reduced. **Things you buy will be priced to attract your dollars.**

In agriculture: Farmers will plant a smaller acreage to cash crops. Many will use this opportunity to improve their land for better and more economical production in the years ahead. Some existing crop surpluses will be worked off through increased consumption here at home, and through bigger exports.

Basis for spring planting

You still have some time in which to change your production plans for 1954—if you want to make last-minute decisions in the light of these facts:

Corn: About 5 million Cornbelt acres will go out of corn. That's a cut of 10 percent. Grow all you need. Concentrate on high yields. But if you exceed your acreage allotment, **your corn won't be eligible for price support.** (*More on allotments, page 15.*)

Soybeans: About 3 million Cornbelt acres will be added to soybean acreage. That's a 25- to 30-percent increase. This is too big an increase for favorable prices. **It probably will shove market prices below support.**

Wheat: Most farmers will stay within their allotments on spring wheat, as they did on winter wheat. This will make most wheat eligible for price support—**and help strengthen market prices.**

Hogs: Some folks, carried away by current high hog markets, will boost sow breeding. Take it easy! Prices will be **lower** next fall and winter than in 1953, and **a lot lower** during first half of 1955 than in the corresponding period of 1954.

Cattle: Slaughter will be big, but probably not as big as in 1953. Feeders will cost more. So will corn. Profits from fed cattle this spring will induce increased feeder buying next summer and fall. **Don't go "all out" in filling feedlots.**

Poultry: Year began with 3-percent increase in potential layers. That's about enough. Prices of spring eggs will be a little lower than last year's. Ideal will be to hold production around last year's level. More eggs will mean lower prices and lower poultry income.

Dairying: We will produce more milk than will be consumed. The surplus will boost government stocks of butter, cheese, nonfat powder. Take advantage of improvement in slaughter-cattle prices to cull dairy herds for increased production per cow.

Bigger spring pig crop

In case you missed the government pig-crop report in your February *Successful Farming:* It showed a 9-percent reduction in the fall pig crop now being marketed, instead of the 5 percent indicated last June. Cornbelt reduction is 6 percent.

You should: Command good prices for the rest of your fall pigs. And a little more fat on your hogs won't hurt prices right now. Lard market is good.

Ahead we see: Spring pig crop that will go to market next fall and winter will be up about 4 percent from last year—with most of the increase in the Cornbelt. Prices likely will be lower than in 1953.

Need less corn

Experts in the U.S.D.A. figure that Cornbelt farmers need to produce only 2 billion bushels of corn this year against last year's 2.5 billion. That's a 20-percent cut. The actual reduction, even with acreage allotments, probably won't exceed 10 percent.

A 1954 crop of 2 billion bushels in the Cornbelt, plus 600 million outside the Cornbelt, plus a 900 million carryover next October, would add up to a "normal" supply of 3.5 billion bushels for 1954-55, compared with this year's 3.9.

Corn carryover picture

It looked for a while as though the corn carryover wouldn't be much, if any, bigger next October than last—but that was before a further cut was reported in fall pigs.

At the same time, January 1 farm stocks of corn were actually smaller than a year earlier. This situation, carried through October, would strengthen corn prices.

For you this means: Don't be afraid of corn. It's valuable. Bigger spring pig crop will be eating more corn from this year's corn crop. Upping of poultry flocks also means bigger consumption of feed.

Wheat sales slow

Wheat exports under the International Wheat Agreement have been below last year's—even though grain has been priced below I.W.A. maximum at $2.05 at Fort William. Subsidy exports outside the agreement also have not yielded much business. But Japan likely will take some wheat above its I.W.A. quota—Germany, too.

Looks like available carryover will be around 800 million bushels this July—unless some of the wheat actually is government double-locked for use only in extreme emergency. A smaller crop outside the United States this year could turn the situation quickly in your favor.

More and more milk

Net of the dairy outlook is this: Milk production will top last year's high record, 120 billion pounds—which was 5 billion more than in 1952.

January government buying of dairy products was big, will continue big through spring flush. **Milk prices will be lower than last year's.** You must cut production costs of every pound you sell, in order to return a fair profit margin.

Cattle outlook mixed

Top beef-cattle prices may be on a downgrade during March. Some weakness is normal during the late winter and early spring—and this year the pessimism in business can weaken the demand for luxury steaks. On the other hand, market supplies figure to be less than last year.

This means: The prospect seems to justify holding all high-quality cattle until they are moderately well finished for their grade.

Prices of middle-grade cattle should hold steady during the next few weeks. We're coming to the season when cheaper steers and heifers, and slaughter cows, usually command better prices.

For you this means: Prices are likely to work higher during the next 60 to 90 days. **Plan to move your cheap cattle before June.**

Narrow broiler margins

Best guess now is that broiler margins will continue narrow in 1954. This may check the national expansion somewhat. It will take careful management for profits.

Need not fear future

The year 1954 should see tightening competition resulting in goods of better quality, and also somewhat lower prices. Inefficiencies in labor and management will be tackled and inventories will be cut. The lost art of salesmanship will be rediscovered. If these things are done promptly and with vigor **we need not fear a prolonged setback.** END

Standard Oil brings you a gasoline with a difference you can see. Quality-guarded from refinery to farm. It's PURPLE for your PROTECTION!

NEW STANDARD RED CROWN

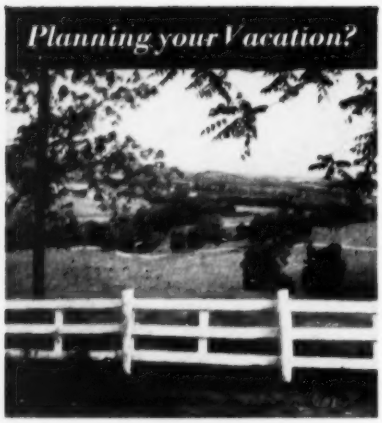
All gasolines alike? Of course not! Some are definitely better than others and RED CROWN is best of all when it comes to guarding uniform high quality. Yes, it's purple for your protection. Now, you know at a glance you are getting STANDARD RED CROWN and nothing else. That means you're getting a gas that's always uniform . . . always the same high quality . . . packed with power . . . made for fast starts and warm-ups, *quality guarded* to give more acres per gallon.

With 6,000 agents and drivers in the Standard service army there is an agent near you. Order your fill of New STANDARD RED CROWN Gasoline today.

*New STANDARD RED CROWN with distinctive purple color is now available in the following states: Michigan, Indiana, Wisconsin, Illinois, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Kansas and Nebraska.

You expect more from STANDARD and get it!

Planning your Vacation?



See blue-grass farms and cotton plantations

blue lakes and historic shrines

see all of

Tennessee

You'll never forget a vacation in Tennessee! From the Mississippi River to the Appalachian Mountains you'll see an amazing variety of farms and prize herds, deep forests, blue lakes with excellent fishing, and towering mountains.

You'll see the Great Smoky Mountains National Park, Cherokee National Forest, and Tennessee's 19 fabulous Great Lakes. You'll inspect TVA dams, visit the world's only Atomic Energy Museum at Oak Ridge, tour historic battlefields, and see the homes of three Presidents—Jackson, Johnson and Polk.

Yes, for **three vacations in one,** with minimum driving and expense, see Tennessee! Roads are fine, accommodations plentiful and reasonable.

Mail Coupon for
FREE COLOR BOOK

Tennessee Div. of Information
Room 1011
State Office Bldg.
Nashville, Tenn.

Please send Free Color Book on Tennessee

NAME _____

STREET _____

CITY & STATE _____

Friend to Friend

Bright promise of irrigation—Grass farming calls for special skill—Oh! for more weed killers

Kirk Fox

● For most of you living south of a line running east and west through northern Illinois, **1953 was a dry year.** Consequently, I find much interest in **sprinkler irrigation.** Recently, I drove the full length of the Platte River Valley where Nebraska farmers have been developing both gravity and sprinkler methods of irrigation rapidly.

Never have I seen such an abundance of alfalfa and corn. Barber-shop conversation may have been a bit exaggerated, but it was about yields of 145 bushels of corn per acre as a regular expectation. The figure was confirmed in private by reliable friends.

By saving some of the water which falls every spring, **Cornbelt farmers could increase yields of corn** and pasture when summer dry spells come along. Actually, many already are doing it. We need much more information on how and where to build earthen dams for **water storage.** Creeks and rivers are not dependable, especially when several farms start drawing on them. Wells are usually too expensive. Based on a 5-year program, irrigation in the Cornbelt usually pays if properly done.

● My friend **Russell Engberg,** research director for the Farm Credit Administration, has made extensive studies of the problems involved when a man **shifts** his farming program heavily **to grass** as dictated by good soil-conservation practices. As important as conservation may be on many farms, it must be undertaken with careful thought given to possible **financial requirements.**

Often the added fixed investment and annual increased operating costs are not justified by **returns.** This is not a criticism of grass farming, but rather of management practices of some farmers. Growing into a grass economy over several years seems much sounder than a quick, heavy turnover. More studies are needed to guide those whose land should not be producing so many row crops. **Investment in grass establishment,** livestock to market it, housing for livestock are all mighty pertinent factors to be considered.

● Can you remember **pulling milkweeds** in the oats when you were young? Next to pulling cockleburs in corn, it's the meanest job, especially when there is fishing to do. Wonder why some smart chemist hasn't found a **sure killer for milkweeds?** Perhaps none of them ever pulled the things on a hot day.

● It's time to be getting **soil samples** to the laboratories if you plan a liming or **fertilizer program** this year. And be sure to read carefully your laboratory's instructions for taking samples. I have seen them arrive in everything from a catsup bottle to a 2-pound sack.

I have a personal appeal from a young lady who works in a **Wisconsin soil-testing** office, to urge more care with samples. She says one-half cup of soil is enough. And put the **number** and **name** on the side of the bag and not on the bottom where moisture often makes reading it impossible. These laboratory girls all work hard for us. Let's help them.

● **"Work at Safety to Make Safety Work"** are the words my friend Norval Wardle uses to close his report on farm accidents in Iowa. Norval is extension engineer responsible for safety work on Iowa farms and in Iowa homes. Twenty-six states have one or two men in similar work. I hope you are acquainted with the man in your state. Work with youth groups and adults in behalf of safety is getting **excellent** results. Tractor accidents were fatal in 30 percent of the cases Wardle reported from May through November, 1953. **Keep children away** from them at all times.

● When I was courting my wife, who was a **schoolteacher,** it was necessary in order to reach her school 30 miles from home, to start at 4 o'clock Sunday evening by train. Since she had to change railroads, she reached her boardinghouse about 2 o'clock the next morning. Our daughter is now a **schoolteacher** in California. She left us one Sunday afternoon at 4 o'clock and was in Long Beach, 2,000 miles away, at the same hour Monday morning that her mother used to reach her room 30 miles from home. Is it any wonder we **old-timers** feel **a bit dizzy** at times?

● In a cross-country air trip of 700 miles this spring, I was astonished by the number of trench or **stack silos** I could see that I had previously missed driving over the same route. Seems like the British plan of **clamp silos** is in the majority. It consists of planks built up 10 or 15 feet to form sides for the rectangular stack. So far, I know of no research covering comparative **costs** or **wastage** of the different types.

Self-feeding devices make the trench or stack silo a permanent threat to the circular upright kind. Man-hours required to empty either type must be reduced.

New!... Ultra-New for '54!

JUST WAIT till you see it! Oldsmobile's —Super "88" for 1954—the *newest* new Oldsmobile in 57 years. With that new longer, lovelier, low-level silhouette—so low you can look right over the top! With a daring "new slant" in its panoramic windshield . . . a definite "sports car look" in its sweep-cut windows and doors. And just wait till you drive it! There's 185 horsepower in that new World's Record "Rocket" Engine, plus the highest compression ratio in Oldsmobile history. More dazzling performance than ever . . . and new economy, too! So make a date with this *new* "88" . . . it's at your Oldsmobile dealer's *now!*

Car illustrated: 1954 Super "88" Holiday Coupé. White Sidewall Tires optional at extra cost. A General Motors Value.

World's Record "Rocket"

OLDSMOBILE

NOW ON GALA DISPLAY AT YOUR OLDSMOBILE DEALER'S

Quit paying out for wind damaged roofs!

Re-roof now with Celotex STA-LOK* SHINGLES

- Each STA-LOK shingle is anchored at 8 separate points. Interlock so securely they defy fiercest gales. No costly shingle "blow-ups."
- Positive, lasting protection against wind, snow, rain, sleet, hail. Actually, STA-LOK Shingles give *double-protection* on 100% of roof, *plus* triple coverage on 42%.
- Exclusive Celotex Triple-Sealed Process builds in extra years of trouble-free service.
- Handsome pattern, deep-grained texture, in a variety of Harmonized Blends and Colors.
- See Celotex STA-LOK Shingles at your Celotex dealer's next time you're in town. Also, ask to see Celotex Triple-Sealed Asphalt Shingles in other styles and patterns, too. *Trade Mark

P.S. Modernize . . . give your home and other farm buildings greater value and beauty with Celotex Insulating Siding. Goes on right over old exterior. Ends outside wall painting, insulates, strengthens—at low cost. Brick, stone, shingle patterns in a range of beautiful colors.

Insist on genuine

CELOTEX

REG. U. S. PAT. OFF.

BUILDING PRODUCTS

The Celotex Corporation, 120 S. LaSalle St.
Chicago 3, Illinois

FREE BOOKLET—MAIL COUPON

The Celotex Corporation, Dept. SF-34
120 S. LaSalle Street, Chicago 3, Illinois

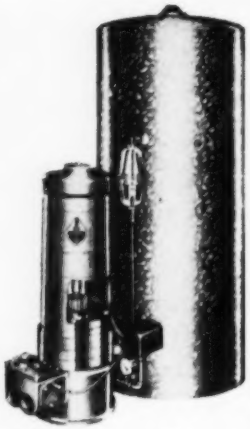
Please send me FREE the Celotex Farm Book showing how to insulate and modernize farm buildings for greater comfort, profits, convenience.

Name ..... Route .....

P. O. ..... County ..... State .....

What's new in farming®

Tips you can use today



Deep-well jet pump. This pump does not need a foot valve below ground to hold the water in pipes. Two check valves, one in each pipe at pump, hold pressure in tank and pump. Water in pipes drains back to well. Pipes need not be frostproofed between pump and well.

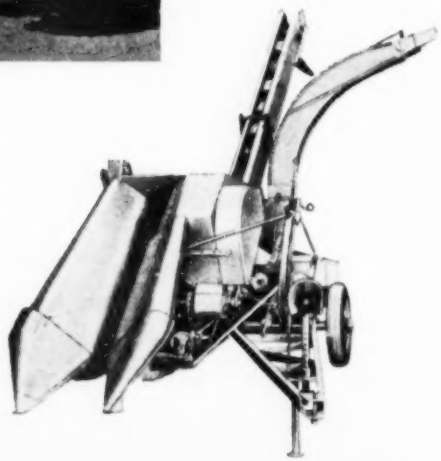
When pump starts, water from tank goes through one check valve to jet in well, back through other pipe, check valve to pump. No priming needed.—*Jacuzzi Brothers, Inc., Richmond, California.*

Sponge washcloth. New type of cleaning aid especially designed for washing udders, teats before milking, is made from cellulose sponge, 8" square and 3/8" thick. It is said to rinse out clean and won't absorb odors. Tests indicate that it will last for 800 washings.

The sponge has heat-retaining qualities which are desirable for stimulating flow of milk. Sponge is packaged in cellophane bag.—*E. I. du Pont de Nemours and Company, Wilmington, Delaware.*

New diesel tractor. This 4-cylinder tractor is said to operate on an average of 1½ gallons of furnace fuel oil an hour. The transmission gives 10 speeds forward.

The double-disc brakes are standard equipment but an independent hydraulic system and power take-off are optional.—*Sheppard Diesels, Hanover, Pennsylvania.*



Corn harvester. Picking one row of corn and chopping the stalks for delivery to a wagon alongside or to the ground, is the job of this combination corn-picker-forage harvester.

Picking rolls are easily adjusted and a special shelf saves corn which may be shelled in harvesting operation. A 2-plow tractor will operate it.

Bedding is saved on grassland farms, soil erosion is reduced, it helps control corn borers.—*J. I. Case Company, Racine, Wisconsin.*

McCormick No. 45, largest selling pto-operated baler, is quality-built throughout to work non-stop in toughest conditions season after haying season.

For only 2 days' baling a year...

it will pay you to own a McCormick® No. 45 Baler

New McCormick No. 55 engine-driven balers have rugged strength and 10-ton-an-hour capacity needed by custom operators and commercial hay growers. Big 15 x 19-inch bales, as heavy as 125 pounds, are easy to stack. Your choice of wire or twine tie.

You can easily bale 75 tons of hay or straw in two days with a McCormick pto-driven baler! Hiring it done, for as little as 15 cents a bale, this tonnage would cost you over $320. Now, figure *all* the costs of using your tractor and a low-cost McCormick No. 45 baler, and you'll find *you can bale it yourself for less!** Even more important, you can bale the minute your crop is ready to store. You avoid weather damage and excessive leaf loss, keep more feed value in your hay.

You turn out 60-pound, pre-sliced, rectangular bales at rates up to 6 tons an hour with the No. 45. Simplified McCormick knotters make firm ties that stay tied! The light-running No. 45 is easily operated from the power take-off of a Farmall* Super C or other 2-plow tractor.

** This comparison includes the cost of twine, labor, tractor fuel, and all other operating expenses as well as annual depreciation and maintenance.*

Make your own cost comparison between do-it-yourself and hire-it-done baling. Write today for baling cost chart that makes this comparison easy and accurate. Ask your IH dealer for all the facts about McCormick balers.

INTERNATIONAL HARVESTER

International Harvester products pay for themselves in use—McCormick Farm Equipment Farmall Tractors . . . Motor Trucks . . . Crawler Tractors and Power Units . . . Refrigerator Freezers—General Office, Chicago 1, Illinois

Send for FREE information

International Harvester Company
P. O. Box 7333, Dept. SF-3, Chicago 80, Illinois

Tell me more about McCormick balers and the way they can lower my baling costs. Please send following:

☐ No. 45 baler catalog ☐ No. 55 baler catalog ☐ Baling cost comparison chart

Name _____

Address _____

I farm _____ acres

My IH dealer is _____

(*Advertisement*)

Saving baby chicks takes more than good luck

Are you taking advantage of all these new developments to grow strong, healthy chicks?

By Walter J. Leeds

We were startled when the lady told us she had "pretty good luck" with her chicks. Actually, she had lost 21 out of 304 chicks the hatchery delivered.

If she thought that was good luck, she should have talked with some of the other poultry raisers we interviewed that day. Most of them had the healthiest baby chicks we ever saw—many had not lost a single chick. And "luck" had nothing to do with it.

First, they used good common sense about heating and sanitation. Second, they depended heavily upon a new wonder-working development called life-saving Livium. This powerful balance of ingredients, introduced exclusively by Nutrena Mills, has become truly a blessing to millions of baby chicks.

The Nutrena folks step up their chick starter with this life-saving Livium. Pretty easy to see why so many poultry raisers have such confidence in this starter. Livium contains *guaranteed effective amounts* of a chick-type antibiotic and vitamin B-12, plus all other known important growth promoters.

But that's not all. Livium actually helps you fight off those serious outbreaks of Coccidiosis; allows your chicks to build a natural immunity against additional stunting or killing attacks.

And your feed can do a better job, too. With Coccidiosis in check, all the nutritional power in Nutrena Chick Starter can be even more effective. The vitamins and minerals get a better chance to get through the digestive system and into the blood stream.

Imagine having all this chick-saving power at work in *your* brooderhouse this Spring! It can sure take a load off your mind. What a relief to see those birds fill-out and feather-out fast, without worry over disastrous Coccidiosis loss. What a thrill to see those little featherballs grow safely into vigorous pullets and heavy layers.

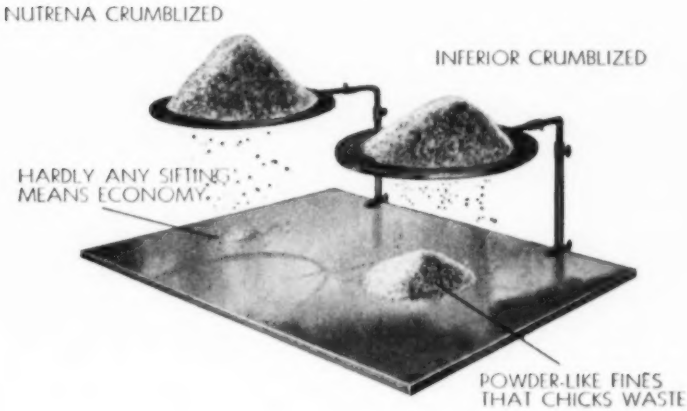
So many of your neighbors have taken the gamble out of chick raising by switching to Nutrena, why don't you try it, too. Palatability, rate of growth, livability—all must be tops.

In fact, after trying your first bag, if you don't agree that Nutrena Chick Starter is the best you ever used, you can get your money back. Just send the empty bag to Nutrena Mills in Minneapolis, Minnesota for full refund. Isn't it time *you* tried Nutrena?

Miracle chick-savers like Livium with antibiotic, vitamin B-12 and anti-Coccidiosis wonder drug can boost livability—if you use enough and use them right.

"We had just perfect luck with our chicks this year," write Donovan and Mary Ganoe, of Adel, Iowa. "The birds were started on Nutrena Chick Starter and we didn't lose a one. They grew faster than ever before, too, many weighed four pounds at eight weeks. The whole flock is averaging about 86% production now. Life-saving Livium in Nutrena is wonderful. There's no better chick feed than Nutrena."

Mrs. Henry Muhle, Jr., Walthill, Nebraska, reports, "I honestly believe the new life-saving Livium in Nutrena Chick Starter did save my chicks. All my chicks got Nutrena right from the first day, and I didn't lose a bird to Coccidiosis. And what good, healthy chicks they were. Nutrena Chick Starter gave me the liveliest, fastest growing, earliest feathering birds I've ever raised. Livium's new life-saving power has sure proven itself to me. Thanks to Nutrena I have a good, healthy bunch of chicks."



"We didn't have a bit of trouble with Coccidiosis this year," writes W. H. Boettger, Rt. 5, Oklahoma City, Okla. "We started our 300 pullets on Nutrena Chick Starter with life-saving Livium. We housed nearly all the birds at 5 months, and about 15 days later the big husky pullets started production."

Shake-Down Test Proves Big Difference in Crumblizing

What a difference there can be in crumblized feeds! And this difference is highly important. Notice the pile of Crumblized Nutrena Chick Starter on the left above. Pieces are uniform, highly palatable—just the size chicks love. And see how little feed has sifted through the No. 16 U.S. Standard screen on the left. This means very little dusty, fine material for chicks to waste. Nutrena screens it out.

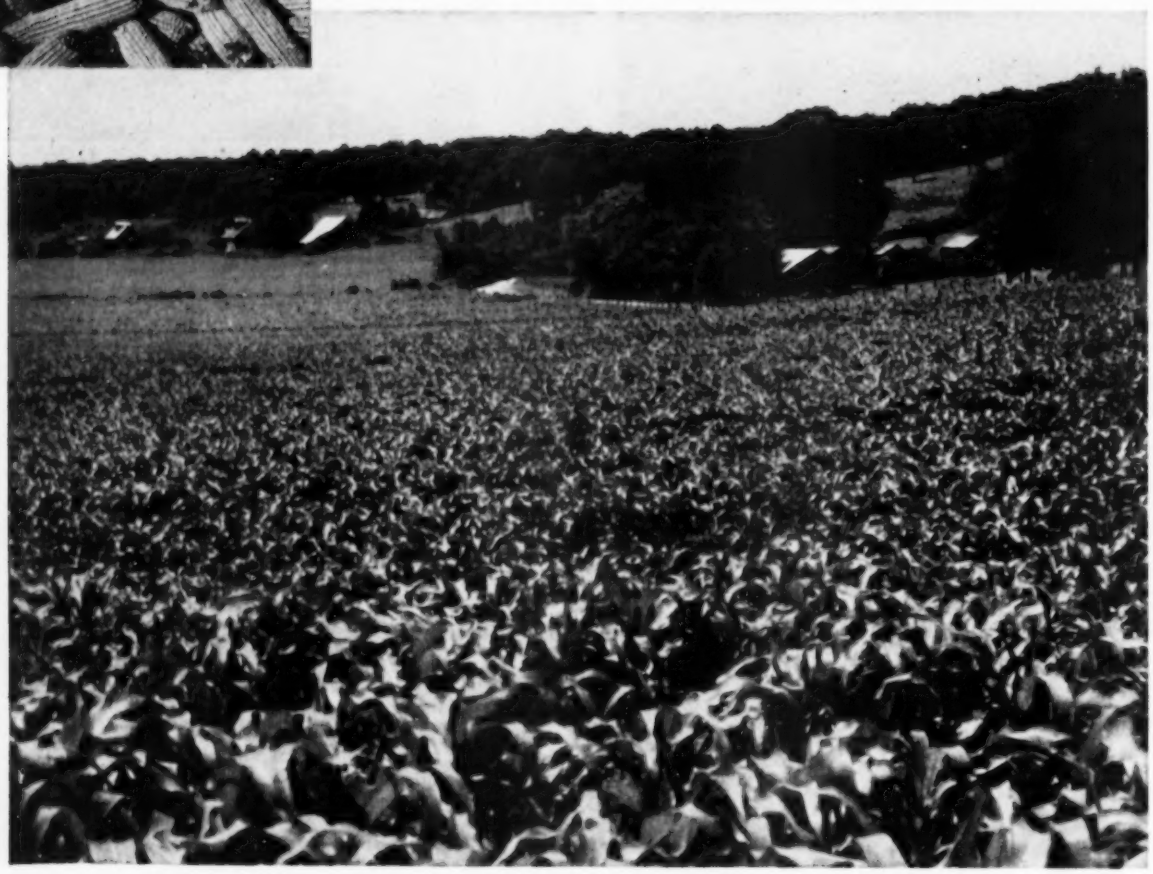
But see the pile of inferior crumblized feed on the right. Pieces are irregular in size. See how much powdery waste there is in this pile of irregular size crumbles—much of it has sifted through to the pan below. This dust-like material is often wasted. Chicks either bill it out or fail to eat it because it isn't as tasty as the good uniform crumblized.

We invite you to compare Crumblized Nutrena Chick Starter with any other on the market. See the difference for yourself. One quick look should convince you to try Nutrena's crumblized. It costs no more than mash. So why not try Crumblized Nutrena Chick Starter this Spring?

Look for the name Livium on every bag of Nutrena Chick Starter and be sure of getting the powerful chick-saving protection of this modern development. Livium was introduced exclusively by Nutrena to help save more chicks. Have Nutrena Chick Starter on hand the day your chicks arrive.

Nutrena Mills, Inc., Minneapolis, Minnesota

Two crops per year from the same land



Make Your Corn Pay You More!

Many leading farmers have doubled and tripled corn yields by greatly increasing their per-acre application of V-C Fertilizer. It's like growing two or three crops of corn on the same land the same season. Yet they plow, plant, spray and cultivate only one! Their only extra costs are for fertilizer, seed and harvesting.

The extra bushels added to your yield by V-C Fertilizer are the most economical and most profitable bushels you produce. When you double or triple your per-acre yield with V-C Fertilizer, you greatly reduce your cost per bushel and increase your net return. You are in a better position to make money from your crop whether corn prices are high or low.

Start now to make your corn pay you more! Produce big yields of high-quality, high-feed-value corn per acre at low cost per bushel! Use good seed, close spacing, approved cultural practices and a heavy application of V-C Fertilizer.

Your V-C Agent will supply you with the right fertilizer for your crop. There's a V-C Fertilizer for every crop on every soil. Ask about V-C Fertilizers for corn, soy beans, small grains, pastures, fruit, truck and other crops.

VC FERTILIZERS

Each V-C Fertilizer is a rich, mellow blend of better plant foods, properly balanced to supply the needs of the crop for which it is recommended. Produced by a national organization which has manufactured better fertilizers since 1895, V-C Fertilizers are your best investment. *Use more in 1954!*

USE BLACK LEAF PEST CONTROL PRODUCTS

"Black Leaf"®

When you buy V-C Fertilizers to grow profitable crops, place your order for reliable, dependable Black Leaf sprays or dusts to protect your crops from insects and other pests.

Farm news of the month

Latest farm program views

Des Moines, Iowa, February 20—In a speech prepared for delivery this noon at the National Farm Institute here, former secretary of agriculture, Henry A. Wallace, says, "My greatest fear is that farmers, themselves, may destroy the farm legislative machinery by asking it to do work for which it was never designed. . . . In the long run, the Ever Normal Granary Program can be sustained only by a flexible support price system. This is especially true of corn."

He explained that acreage controls may possibly reduce cotton production enough to maintain a loan at 90 percent of parity over the years. But, he continued, with good weather and no new war, a 90-percent corn loan will build up utterly fantastic supplies and endanger the whole system of commodity loans and the Ever Normal Granary. Big corn yield boosts from generous use of fertilizer, increasing acreage of other feed grains, and use of corn on diverted wheat and cotton acres were cited as reasons why a high corn loan couldn't be maintained.

"Wheat is a totally different problem from corn—because there is no indication that lower prices will increase consumption," Mr. Wallace believes. "Under special conditions, two price systems may be warranted with wheat and cotton."

Earlier in the day, Clifford R. Hope, chairman of the House Agriculture Committee, is scheduled to state the case for a two-price plan. He believes it may be a way of getting more flexibility into the farm program—by giving farmers a choice of a two-price plan or acreage cuts—for products which have a large export market.

In this afternoon's session of the Farm Institute, which annually deals with current farm problems, Dr. T. K. Cowden, head of Michigan State College's department of agricultural economics, will suggest needed farm policy changes:

1. If farmers want high price supports, they will have to accept rigid controls, too.
2. We must find ways to get rid of high government storage stocks of farm products.
3. We must face the diverted acreage problem.
4. We can't solve our farm problems by export dumping in other countries.
5. We should get flexibility into the program.
6. We need a special program for low-income farmers.

What corn allotment means to you

Here's a summary of what the corn acreage allotment means in terms of your farm and your corn crop:

1. Nationally, the allotment is aimed at a cut of 17.4 percent—from 56,819,428 acres in 1953 to 46,995,504 in 1954. The cut on *your* farm will vary some with the corn acreage trend in your county during the last 10 years, and with the acreage you've had in corn in the past few years.
2. You'll be told what your allotment is before corn-planting time this spring. Time will vary between states, between counties.
3. There is no fine or cash penalty for planting more than your allotment—but *if you overplant, you can't seal your crop next fall.*
4. If you stay within your allotment, you can get a loan or purchase agreement on your corn at 90 percent of parity. Your loan price probably will be a couple of pennies under the 1953 price—$1.60 a bushel, nationally.
5. President Eisenhower's request for corn supports at 75 to 90 percent of parity, and other plans being considered by Congress, do not affect your 1954 crop.
6. Support level will be lower in the noncommercial corn area—averaging 67.5 percent of parity. Farmers in this area have no allotments.

Now—bacon from beef cattle

A new type of beef product—beef bacon—is now on the market. The beef bacon tastes much like pork bacon but is leaner. A packing plant in Broken Bow, Nebraska, has been marketing the new beef product. One or more of the large meat packing companies may soon market the product, also. Price of the beef bacon is about the same as pork bacon.

Milk fever can be prevented

At least that's the way it looks as the result of a 2½-year experiment on a high-producing California dairy herd. A special low-calcium, high-phosphorus ration—fed to dry cows a month before calving—cut cases of milk fever in the herd to almost zero.

Commenting on the experiment, Dr. J. M. Boda, of the California Experiment Station, Davis, California, says: "I personally think we can prevent milk fever with a low-calcium, high-phosphorus ration. However, we are still in the experimental stage. We are still changing the ration in an attempt to find a practical one for the average dairyman." He suggests that dairymen try the present recommendations only on an experimental basis.

Here is the experimental ration now being fed a month before freshening: 800 pounds of ground barley, 600 pounds of rolled barley, 500 pounds of wheat bran, 100 pounds of cottonseed meal, 100 pounds of monosodium phosphate, and 10 pounds of salt. Each cow is fed 8 pounds of this feed, plus 8 pounds of oats hay per day.

Support 1954 soybeans at $2.22

Your 1954-crop soybeans will be supported at a *national average* price of $2.22 a bushel—which is at 80 percent of parity.

Just a few cents per acre make this difference

Every season thousands of acres of corn turn out like the untreated corn—ruined. Soil insects . . . . corn rootworm, wireworm, and others . . . chew up the corn roots and stunt the plants. The crippled root systems can't get the food and moisture they need, can't grow, and the stalks lodge with the first wind because the roots can't hold in the earth.

But, *by using a single insecticide,* **aldrin,** you can prevent all this and grow sturdy stands of healthy corn. Use aldrin either as a ground spray or mixed with fertilizer, and your worries are over. One treatment lasts the whole season long.

One-half to one pound per acre—just a few cents' worth — is all you need, and it's easy to apply. Your insecticide dealer has it both as a liquid spray and as an aldrin-fertilizer mix. He'll be glad to show you how to use it, too.

Technical aldrin is marketed by Shell Chemical Corporation to well-known insecticide manufacturers who formulate it for sale under their own brand names.

aldrin

SHELL CHEMICAL CORPORATION
AGRICULTURAL CHEMICALS DIVISION
Chemical Partner of Industry and Agriculture
P. O. Box 2171, Denver 1, Colorado
1221 Locust Street, St. Louis 3, Missouri

"WE PULL 5 BOTTOMS IN SHOULDER-HIGH SWEET CLOVER..."

LYLE AND ELLIS ALDRICH, *Fairgrove, Michigan*

"We'd never have gotten our land prepared in time this spring without our Cat* D4 Tractor. Ground was too wet, and wheel tractors simply couldn't handle it. One of the main reasons we have a Cat D4 Tractor is security. We've got to get our crop in on time, and harvested on time. Our hybrid seed corn has to be picked before freezing, regardless of mud underfoot, and our D4 takes us through any soil condition. It plows 2½ to 3 acres per hour, averaging about a gallon of 13.9¢ fuel per acre on this very flat loam soil. The D4's the best investment in power we've ever made!"

Own a Cat Diesel Tractor and you'll have peace of mind this spring: you'll **know** you'll get your ground in shape and your crop in on time . . . **know** that a late, wet spring can't hold you back. Those wet spots in the fields where your wheel tractors bury themselves . . . that heavy, juicy stand of cover crop . . . Cat track-type Tractor grousers bite in and get you through.

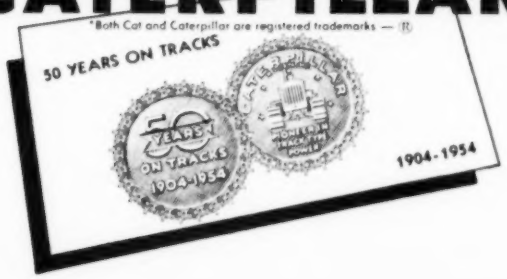
Why can you do so much for so little? Here's why: The 43 drawbar HP D4 pulls 10,600 lbs. . . . twice as much as most 3-4 plow wheel tractors. In average spring soil conditions, it slips very little, or not at all — where wheel tractors may squander 30% or more of their power and fuel on slippage. But seeing is believing! Your Caterpillar Dealer will gladly bring the size you need to your farm — from 35 to 150 drawbar HP — you take the controls . . . you keep the records . . . you name the date . . . he'll demonstrate!

CATERPILLAR TRACTOR CO., PEORIA, ILL., U.S.A.

DIESEL TRACTORS • TOOL BARS • IMPLEMENTS

CATERPILLAR*

*Both Cat and Caterpillar are registered trademarks — ®



For your free copy of "Power Farming," send to Caterpillar Tractor Co., Peoria, Ill., Dept. SF34.

I farm ..... acres. My major crops are .....

☐ Check here for a free demonstration.

☐ Check here if student.

Name .....

Address .....

Purolator's tips for
FARM MECHANICS

Easy engine care now saves repair bills later

Battery care pays off in months or years of extra service. Worst abuse is overcharging. Generator charging rate should never be set higher than manufacturer's recommendations. Always be sure voltage and current regulators are correctly adjusted. Don't let batteries run down in cold weather. They may freeze and crack. Stored batteries should be kept fully charged. Don't let dirt cake up around terminals. It causes shorts when damp. Keep batteries filled to correct level by adding *distilled* water. Prevent acid-corrosion damage by coating terminals and connectors with petroleum jelly or non-graphited cup grease.

Change those oil filters! Clean oil makes engines last longer, start easier, burn less fuel . . . so be sure to replace oil filter cartridges regularly. In dusty work, such as plowing or harrowing, oil filters clog up more rapidly; must be changed oftener. When buying oil filter refills, follow your manufacturer's recommendations. Use only genuine branded refills. Remember . . . the wrong oil filter refill can cause serious engine damage.

Purolators are best for cars and trucks, too! Famous Purolator Micronic* refills—made by the *originators* of automotive oil filters—trap dirt particles so small you can't see them; have up to *ten times* more filter area than old-style filters. Next time you have oil changed, tell your service man to put in a fresh Purolator* refill ...priced low, but the best at any price!

*Reg. U. S. Pat. Off.

PurOlator
World's Finest OIL FILTER

The farmer's Washington®

By Richard Wilson

- **Here's what President Eisenhower's farm program means**
- **Threaten veto of extension of 90-percent supports**
- **Report of how Congress lined up on Ike's program**

Eisenhower recommendations. The opening gun of the farm program legislative battle was fired by President Dwight D. Eisenhower in his farm message to Congress January 11. In brief, here are his views on price supports:

- He recommended allowing provisions of the 1948 and 1949 Agricultural Acts to become effective in providing flexible supports of from 75 to 90 percent of parity for wheat, corn, cotton, rice, and peanuts —after the 1954 crop.
- A faster "flex" up and down was asked for corn—in the recommendation that the support be cut by 1 percent of parity for each 1 percent increase in supply, and vice versa. The 1949 act called for a support-price change of 1 percent for each 2 percent change in supply.
- He favors continuation of supports of *up to* 90 percent of parity on nonbasic feed-grain crops such as oats, barley, and grain sorghums.
- He recommended continuing price supports of dairy products between 75 to 90-percent of parity.
- He called for direct payments to wool growers to make up the difference between the market price for wool and the 90-percent-of-parity price.
- He recommended the tobacco program be continued at 90 percent of parity, while marketing quotas are in effect.

Other highlights in his farm message to Congress were: His recommendation that the modernized parity formula be used—with a gradual letdown in support levels where the 1910-14 figure is now being used; and a recommendation that part of the surplus commodities be insulated from the market—and be used in school-lunch programs, disaster relief, foreign aid, and similar uses.

Reaction to Ike's program. To get the real flavor of congressional reaction to the administration's new farm program, you would have had to be present at a meeting of the Senate Policy Committee. The meeting happened the day after the president's program was submitted.

It was scheduled to consider the many varied issues confronting the party. But everything else was put aside, while various senators took turns teeing off on the president's program and Secretary of Agriculture Ezra Taft Benson.

It was quite a blow to the administration when Senator Joseph R. McCarthy rose to put the Indian sign on flexible price supports. Vice President Richard Nixon—who has been trying to organize the president's congressional strength—had been counting on McCarthy to help out on the farm program.

As expected, Farm Bureau leaders praised the tone of the Eisenhower program, as did the National Grange—whose leaders had hoped for some two-price features. The National Farmers Union was critical.

How they lined up. Senator Allen J. Ellender conducted a poll of the Senate's Agriculture Committee. He reported that a majority of the committee is *against* flexible price supports. Senator George Aiken, chairman of the senate agriculture group, is strongly in favor of the new program. Representative Clifford R. Hope, chairman of the House Agriculture Committee, has shown a distinct coolness toward the proposed farm program.

A good many Midwesterners, however, counted themselves in favor of the program. But it was doubted if the Midwesterners could offset the opposition of some wheat-state senators and congressmen—and the overwhelming opposition in the South.

Flexible "Ike." President Eisenhower indicated he might be as flexible on the *whole* question, as his own program was on price supports. Reporters at a press conference got the very definite impression that, while he backed up his program strongly, he was not stubborn on making changes.

The inside on it is this: Some of the administration people are spreading the word that Ike may veto a new farm bill, if it provides a simple extension of 90-percent-of-parity guarantees. The president ducks when questioned on this possibility, but leaves the impression that use of the veto can't be counted out.

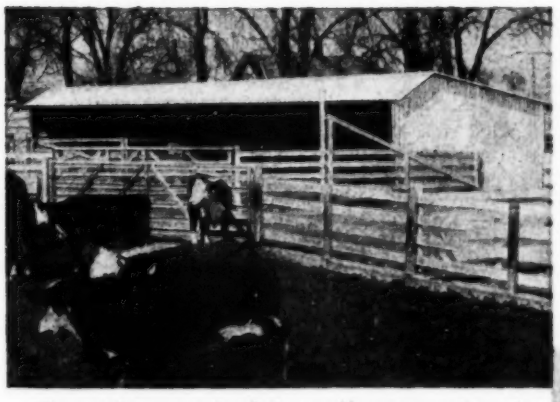
He is said to be very firm in thinking that a farm program can't be allowed to continue which builds up surpluses controlled by the government. Ninety-percent-of-parity guarantees do just that—*according to administration spokesmen.* There-

[*Turn to page 181*

Left, above, one of four 10,000-bird hen houses of Lula Feed & Poultry Co., Gainesville, Ga., roofed in 1949 with Reynolds *Lifetime* Aluminum 5-V Crimp. Below—a typical range shelter.

More Profit Per Pound of Feed with

REYNOLDS *Lifetime* ALUMINUM



"Low maintenance, insulation and appearance" are the reasons Every W. Austin gives for using Reynolds *Lifetime* Aluminum on his South Longmont, Colo., farm. Pole barn shown, for beef cattle, is **"very satisfactory,"** says Mr. Austin.

"More broiler meat per pound of feed," says Larry W. Wolfe, president of Lula Feed and Poultry Co., Gainesville, Ga. "Egg production, too, is higher under aluminum roofing than under any other material, because it keeps down inside temperature."

That profit-making heat reflection of aluminum works year-round...keeps buildings warmer in winter, too. Works for *all* livestock...hogs, dairy cows, beef cattle. Steps up profits while it lowers operating cost. No painting!

Initial cost is now lower than ever, with Reynolds' new 48" wide sheets. See your dealer! **Reynolds Metals Company,** Building Products Division, Louisville 1, Kentucky.

New 48-Inch Widths Save On Labor and Material!

48" wide Corrugated and 8-V Crimp embossed, in .019" and .024" thickness; plain Corrugated in .019". Also standard widths.

USE THESE PLANS FOR LOW-COST, LABOR-SAVING BUILDINGS... PREPARED BY REYNOLDS FARM INSTITUTE.

Check coupon for plans you want...prices include detailed drawings, erection instructions and material lists. Or check coupon for FREE literature.

FARM INSTITUTE

SEE "MISTER PEEPERS," starring Wally Cox, Sundays, NBC-TV Network.

2011

Reynolds Farm Institute, P. O. Box 1800, Louisville 1, Ky.

I enclose $_____ for plans of buildings checked.

☐ Please send FREE literature on buildings checked.

☐ 52' x 60' Pole Barn $1.00
☐ 26' x 60' Machinery Center 1.00
☐ 30' x 32' Corn-Crib .50
☐ 8' x 10' Portable Range Shelter .25
☐ 26' x 60' Pole Cattle Shed 1.00
☐ 1,500-bird Pole Laying House (expandible) $1.00
☐ 10,000-bird Pole Broiler House (expandible) 1.00
☐ 14' x 20' Hog or Sheep Shelter .25
☐ 16' x 20' Cattle Shelter .25
☐ 12' x 20' Sectional 4-Sow Farrowing House .25

NAME _____

ADDRESS _____

CITY _____ STATE _____

For Golden Honey Flavor —IT'S
Post's SUGAR CRISP

Every light golden wheat puff has that magic touch of honey!

WONDERFUL EATIN'3 WAYS!

FOR BREAKFAST IT'S DANDY! IT'S CRISP! IT'S HONEY-AND-CANDY COATED!

FOR SNACKS IT'S SO HANDY! LIGHT 'N CRUNCHY—SUCH FUN TO EAT!

OR EAT IT LIKE CANDY! HEALTHFULLY WHOLESOME—JUST SWEET ENOUGH!

Post's SUGAR CRISP

A Product of General Foods

No wonder it's America's new candy-coated cereal favorite!

Swine-testing station to find

Meat-type strains

Both meat-type and overfat hogs are found in every breed.

Research shows that these qualities appear not to be tied in with the breed, but rather with particular lines or families of hogs. A swine feeding-and-testing station is being built to enable research men to pick out the lines which will produce lean meat-type carcasses. It is a joint project of the Ohio, Purdue, Michigan, and Pennsylvania experiment stations and the United States Department of Agriculture.

Representative pigs from different litters will be fed under controlled conditions. Only differences represented by breeding will show up in the results. When a good meat-type line is found, it will be increased by using the litter mates.

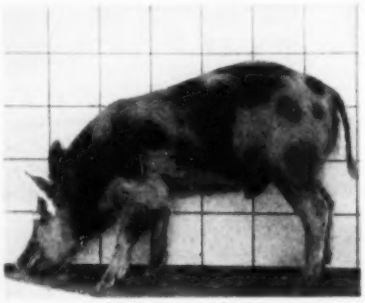
Pint-size hogs

Miniature pigs—weighing less than half as much as ordinary porkers—are being developed by University of Minnesota swine geneticists working at the Hormel Institute at Austin, Minnesota. Eventually they hope to breed miniatures about a fifth of the size of ordinary pigs.

The pigs are being developed at the request of medical researchers at the world-renowned Mayo Foundation. Their main purpose is to help doctors make medical research easier and more effective. These miniature pigs are easier to handle, cheaper to raise, and more adapted to laboratory work. *They also will be valuable for nutritional and animal-disease studies which can later be applied to full-size pigs.*

The ancestry of these miniature pigs is a strange one. First, a cross of wild Guinea hogs from Alabama and wild pigs from the island of Santa Catalina off the coast of California was made. This cross, in turn, was mated with small Piney Woods pigs obtained from Louisiana. Oddly enough, the wildness which might be expected has been replaced by gentleness.

The miniature boar pictured below weighed 25 pounds at 154 days of age. He is approximately 16" high and 26" long and is now being used as one of the herd boars.—*H. S., Minnesota.*



B.F.Goodrich

Power-Grip tractor tire gives you bigger cleats, bigger shoulders!

"Better grip, better traction than other tires!"

Keith Foley sows upwards of 900 acres of wheat on his farm near Cheney, Kansas. One of his tractors is shown above, equipped with powerful, new B. F. Goodrich Power-Grip tractor tires. Foley reports these tires hold better, give better traction than any other tires he has used. That's because knife-action Power-Grip cleats have a bigger face area to press against the soil, take a firm grip for full traction in reverse or forward.

Five types of B. F. Goodrich farm truck tires!

There's a special B. F. Goodrich truck tire for every farm need —five different types from which to choose. The *right one* will save you money. Norman Droese, for example, uses the H. D. Commercial on his delivery truck for trips to the Cleveland, Ohio, farm market.

"Self-cleaning tread in heavy, black dirt"

R. V. Wuensche points to the sharp, clean track left by a Power-Grip tire in the heavy, black soil of his farm near Bishop, Texas. Note that the open-center Power-Grip tread stays clean in this heavy, moist soil to give you better traction.

Count the cleats on leading makes. Time after time you'll find that size for size the BFG tire has more cleats. And no other tire is wider than Power-Grip.

"Less slippage pulling giant loads"

Power-Grip tires pull a corn picker and wagon on the 590-acre Charles Wiese farm at Alda, Neb. These B. F. Goodrich tires are square cut at the shoulders to defy slippage, help Wiese keep on schedule. Power-Grip cleats are higher at the shoulders for deeper penetration, braced to dig in without bending. Every turn of these BFG tires counts for maximum traction.

See your B. F. Goodrich retailer for all your farm tire needs. His address is listed under Tires in the Yellow Pages of your phone book. Or write *The B. F. Goodrich Company, Tire & Equipment Division, Akron 18, Ohio.*

RESEARCH KEEPS
B.F.Goodrich
FIRST IN RUBBER

More alfalfa with SPERGON®!

More money for you!

Spergon Seed Protectant can increase your alfalfa yield substantially for many more market dollars. By preventing seed decay, "damping off" and other fungus diseases, Spergon is your best insurance against the risks of cold, wet planting weather.

Spergon lets you plant less seed and lubricates that seed for less breakage and easier planting. It works very effectively with legume inoculants and is non-hazardous.

Order Spergon or formulations containing Spergon from your local supplier today and watch your profits grow.

Naugatuck Chemical

Division of United States Rubber Company
ELM STREET, NAUGATUCK, CONNECTICUT
producers of seed protectants, fungicides, miticides, insecticides, growth retardants, herbicides: Spergon, Phygon, Aramite, Synklor, MH, Alanap.

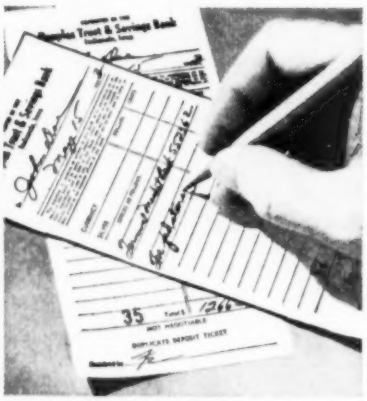
Steps to better banking

You're running a farm business worth several thousand dollars. Good banking habits are important to you in operating in a businesslike manner. Here are some tips which will help you simplify your banking procedures

Number your checks and corresponding stubs in order. Do that first thing when you get a new book of checks. You're apt to forget if you number them as you write checks.

Numbering will help you quickly determine which checks have been cashed when the bank statement comes at the end of the month, and make it easier to check your records.

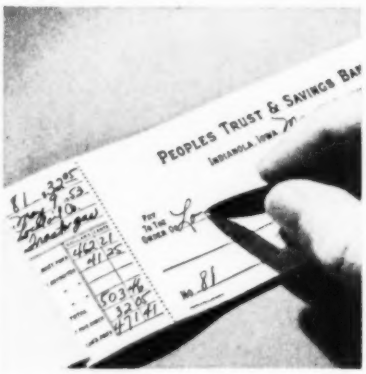
Get a duplicate deposit slip when you add to your account at the bank. Indicate the source of the money on the slip if the teller doesn't.



You'll need these slips for keeping your bank records up to date. And these deposit slips are invaluable evidence of income if your tax return is checked.

Fill in blanks on the stub and figure the new balance before you write each check. Also record each deposit on the stub of your checkbook immediately.

When you keep the balance on hand—



recorded on the stubs—up to date and accurate, you can tell at a glance how your account stands. That helps avoid an accidental overdraft.

Write checks only from your checkbook. If you do use another check form, discard a check from your book and use the stub for recording the necessary information about the check.

Photographs: Hopkins

Correct the balance on your stub record soon—if you forget that "outside" check, you may overdraw your account. Write "void" across the face of the discarded check or tear it up.

Examine your bank statement each month, to see that your records agree with the bank's report. If your records are wrong, find the error and correct the last balance on hand shown on your stub record. That way your stub records are corrected and brought up to date once each month. Small errors that are ignored add up to a considerable sum in a few months.—*Wayne Swegle.*

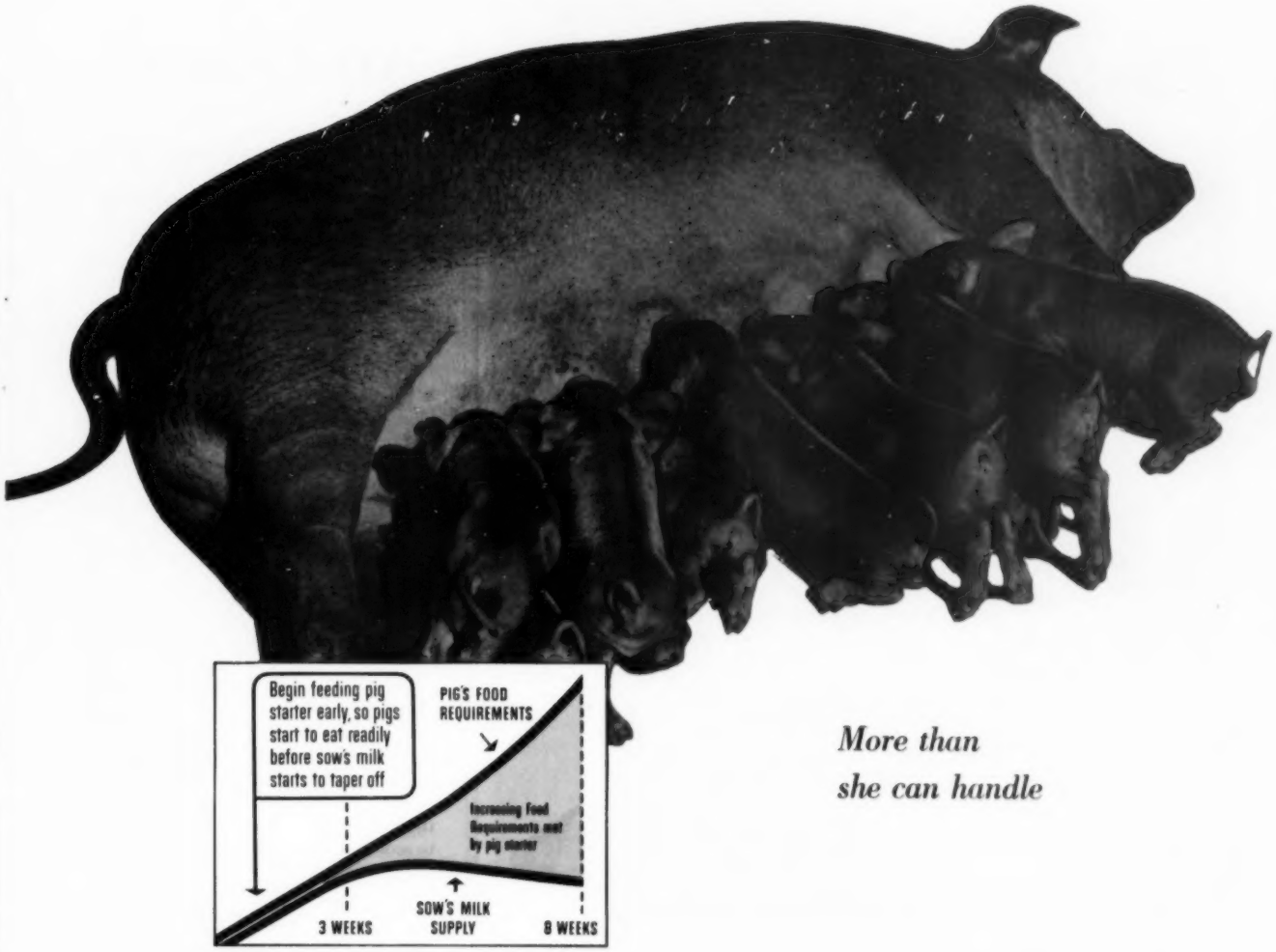


Chart for Raising Prosperous Pigs
(Published again by request)

You can see from this chart why baby pigs need extra nourishment. The sow's milk supply begins to level off just when growing pigs need more and more food. So begin early (3 or 4 days after farrowing) with a good pig starter fortified with Terramycin. Pigs learn to eat dry feed sooner, are gaining fast by weaning time.

More than she can handle

Keep this simple chart in mind if you want to raise pigs that grow fast—hold their baby fat right through weaning—do well all the way to market.

Remember that a husky litter of pigs can eat five times as much as their mother provides.

Arrange now for a reliable brand of pig starter fortified with Terramycin, famous antibiotic that is especially good for baby pigs. The earlier they get Terramycin, the greater the growth response. Then, at weaning, hold the gains you have made by feeding a supplement that contains Terramycin.

Ask your feed dealer for brands with Terramycin, because Terramycin—all the way to market—gets you more pork for your feed money.

Terramycin®
BRAND OF OXYTETRACYCLINE
—from the world's largest producer of antibiotics

Pfizer

Chas. Pfizer & Co., Inc., Brooklyn 6, New York
Headquarters for antibiotics and vitamins for animal health and nutrition

TERRAMYCIN • PENICILLIN • DIHYDROSTREPTOMYCIN • POLYMYXIN

Delicious Karo Syrup makes every bite *taste better!*

Your first taste tells you why more people enjoy Karo than any other syrup

Make Karo your choice! True pancake fans love the rich, full-bodied goodness, the extra-special flavor you get only in Karo . . . America's favorite syrup.

The whole family will enjoy Karo Syrup . . . it's an important energy food, fine for growing youngsters and active grownups.

Try Karo Waffle Syrup . . .

Here it is . . . the best tasting maple flavor waffle syrup ever.

For a smooth, rich maple flavor syrup that really satisfies . . . reach for Green Label Karo Syrup.

All around

Here are tips to help you save some time, space, steps, work

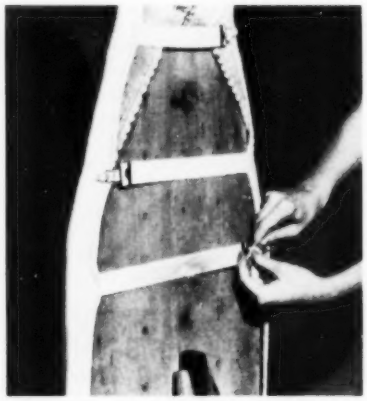
● When we celebrated our silver anniversary, I used aluminum foil under my lace tablecloth. It looked lovely and carried out the silver theme very effectively. —*Mrs. Paul Goetsch, Illinois.*

● **Spectacles will stay free of dust and blurs longer if cleaned this simple way: Dampen a soft cloth with rubbing alcohol and clean the glasses, polishing with a dry piece of the cloth. This will aid a great deal in preventing their steaming when coming from cold air to a warm room in the winter.—*Miss Vera Patterson, Kansas.***

● To protect wallpaper when washing woodwork, slide a ruler along the top of the baseboard as you work. You'll be sure to leave no smudges. —*Miss Marilyn Bingham, Indiana.*

● **I bought a white, rubber cane tip and put it on the end of my red dust-mop handle. Now I can rest the mop against the wall and there are no colored marks to scour off.—*Mrs. Gordon Parry, North Dakota.***

● When making doll clothes, use elastic thread at the waist, neckline, and armholes. This makes doll dressing easier for small tots.—*Mrs. Louis Bieri, Iowa.*



● **For a handy way to make a homemade ironing-board cover fit tightly, I found that the use of four garters (stretchability about 6-8 inches) sewed to the underside of my material works very well. Four of them will hold the cover taut if placed so that the first buttons on the left side, the second on the right, the third on the left, and so forth.—*Miss Maxine Bischoff, Ohio.***

● To keep a child's barette from slipping off her hair, glue a tiny piece of sponge rubber to the inside of the barette.—*Mrs. A. O. Jacobsen, Wisconsin.*

the house®

● If rubbers have become stretched and slip off easily, glue a band of felt around the inside top of each rubber.—*Mrs. Hugh J. Chrisman, Oregon.*

● We have a picture window which is set close to the ground. It used to get splashed a lot and needed frequent cleaning. We solved this by laying down a bed of small gravel directly in front of the window.—*Mrs. H. H. Bye, Minnesota.*

● When my sheets have given their "all" in family service, I use them to make play tents for the children. Crayons can be used to draw windows, and I cut a door. Draped over a card table, it will furnish hours of fun, especially on those long, rainy day.—*Mrs. Georgia Molloy, Minnesota.*

● A small clothes hamper is an attractive and accessible location for soap and other supplies in a bathroom which has little storage space.—*Mrs. J. F. Weeks, Indiana.*

● Here's a place to keep the rims of two-piece jar covers. Flatten a wire coat hanger to a double straight line, leaving the hook intact. Slip jar rims on and bend to a circle, looping the end of the wire in the hook.—*Mrs. Clarence Dittrich, Michigan.*

● If it is necessary to place a young baby on a large bed, or one without siderails, put pillows on each side under the mattress. This makes a valley from which the baby cannot roll, and the pillows can't be pushed off by the baby's kicking as is the case when they are laid on top of the bed. —*Mrs. V. M. Ruegseger, Michigan.*

● Stamps often get wet in rural mailboxes when it rains, but this can be avoided by the addition of a pint jar to the inside of the mailbox. Bolt the lid of the jar to the side of the box and turn the jar on the lid.—*Miss Frances Matal, Kansas.*

Successful Farming will pay $5 for each helpful suggestion published. We cannot return unused suggestions.—Editors

Do you think "Navarre" is a good name for this lovely Fostoria etching?

We think it fits; see if you agree. Navarre was an old European kingdom back in the days of troubadours and tourneys, when a bold knight's helmet often bore a flower from the hand of his lady fair. Fostoria's *Navarre* has flowers, the hint of a coat of arms, and altogether a flavor of chivalry and romance. *Navarre* is handblown—just the way glass was made then, too. In candlelight on your table—wonderful! And just think what a delightful bridal gift a place setting would be. The one we suggest in the illustration above is $11.50*. In open stock because it's made by the Fostoria Glass Company in Moundsville, West Virginia.

**slightly higher in the West*

FOSTORIA

A new kind of supplement
unlocks new feeding values
in your home-grown feeds

There's good milk-making value in all your home-grown feeds, even your coarsest roughage. But some of this feed value will go to waste if your cows can't break down the tough cellulose fibers in these feeds.

Many dairy feed supplements now give cows greater ability to digest all qualities of roughage because they include Du Pont "Two-Sixty-Two" feed compound. "Two-Sixty-Two" provides urea nitrogen which cows make into protein, and, in the process, they get an important added benefit which helps stretch your feed supply.

This new benefit is the result of increased rumen activity. When properly blended with other ingredients, the nitrogen of "Two-Sixty-Two" nourishes and stimulates the rumen bacteria. It helps the bacteria multiply faster with the result that fiber in all feeds is broken down and digested more rapidly and more completely.

These new supplements fortified with "Two-Sixty-Two" help you cut your milk production costs—help your home-grown feeds do a better job. Talk it over with your feed man.

E. I. du Pont de Nemours & Co. (Inc.), Polychemicals Department, Wilmington, Delaware, or 7 So. Dearborn St., Chicago, Ill.

DU PONT
REG. U.S. PAT. OFF.

TWO-SIXTY-TWO®
Feed Compound

BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY

News for hogmen . . .

Cadmium wormers look good

Two pharmaceutical companies testing cadmium hog-worming compounds say the new wormers will knock out roundworms without setting back the hog.

No agricultural colleges have released research findings on the cadmium wormers yet. But here are the claims for cadmium made by the two companies.

It gets the worms. One company reports its cadmium wormer knocked out 87 to 100 percent of roundworms.

Cadmium actually *kills the roundworms inside the hog*, before they are naturally expelled. Many present wormers only stun the worms so the hog can expel them.

It is safe. Hogs wormed with cadmium, say these pharmaceutical companies, go right on eating. In tests so far, not enough cadmium could be fed to kill a hog. If the hog gets too much, it vomits.

It's cheap, too. One company estimates it costs about 8 cents a hog.

Here's how it's used. One pound of cadmium-bearing compound is added to 100 pounds of feed. This worms about 10 to 13 pigs of weaning age. This treated feed is kept before pigs for 3 days. It can be added to dry or wet feed.

Caution. One company warns that the meat from treated hogs should not be eaten for 30 days following worming.

New cholera control tested

A new method of using crystal violet glycerol hog-cholera vaccine—injecting it into the pig's ears—is being tried by the Bureau of Animal Industry. Dr. J. P. Torrey is in charge of the experimental work. Results indicate that only $\frac{1}{5}$ as much vaccine is needed as compared to the old method to give protection.

Tests in other countries show the ear method can be used with antihog-cholera serum. As yet, this practice has not been proved in this country.

Here's the inside story on why

YOU GET MORE MILES MORE RECAPS WITH ARMSTRONGS!

Exclusive Double Insert Plies Protect Vital Section Under Tread From Impact Breaks, Blisters, Separation!

No wonder Armstrong Truck Tires give you extra wear, mileage, recappability! For *only* Armstrongs contain 2 special insert plies *in addition* to a breaker strip! This extra strength helps hold the carcass tight – halts tire growth – eliminates mileage-consuming "stretch." And, by guarding against heat and impact breaks, it makes Armstrongs up to *71% more recappable*, as proved by tests!

You Pay NOTHING EXTRA for ARMSTRONG'S EXTRA QUALITY

HERE'S PROOF OF ARMSTRONG'S EXTRA STRENGTH!

Comparison of 900 x 20 10-Ply Highway Tires of First Line Quality

	Armstrong	Brand "A"	Brand "B"	Brand "C"	Brand "D"
Total Carcass Strength	6,270 lbs.	5,297	5,384	5,189	5,247
% Rating	100%	84.5%	86%	83%	83.7%

Source: Independent Research Agency

ARMSTRONG Rhino-Flex TRUCK TIRES

WEST HAVEN, CONN. NORWALK, CONN. NATCHEZ, MISS. DES MOINES, IOWA

With a Smile!

WE'RE IN BUSINESS to pay losses—and to pay them with a smile.

That's the whole purpose of insurance—to soften the blows of adversity as far as possible by replacing the monetary loss.

Yes—there are times when we resist claims—but that is only when they are excessive, fraudulent or in a case of third party liability—when the people we insure are not legally at fault. This is in the public interest—for the amounts *you* pay for insurance are based upon the loss experience of the industry in each type of insurance written.

When you buy insurance in long-established capital stock insurance companies through a dependable agent or broker, you can be sure that in case of loss you will get prompt, friendly assistance and every dollar you are entitled to—with a smile.

For the name of a nearby America Fore agent call Western Union by number, ask for operator 25.

For Peace of Mind insure with America Fore INSURANCE GROUP

★ The Continental Insurance Company ★ Fidelity-Phenix Fire Insurance Company
★ Niagara Fire Insurance Company ★ American Eagle Fire Insurance Company
★ The Fidelity and Casualty Company of New York

Certified Alfalfa—*best buy*

Does the farmer always get the alfalfa variety he thinks he is buying? To answer these questions, R. L. Davis and A. S. Carter, Purdue Agricultural Experiment Station, grew over *200* alfalfa samples collected from seed dealers by state seed inspectors. Two varieties, Ranger and Buffalo, were *certified* seed. The others, including Grimm, were *noncertified*.

In these "trueness-to-type" tests, 61 samples labeled "Grimm" were the worst of the lot. Only 21 percent of the 61 Grimm samples were pure Grimm type—the remainder were either nonhardy or common varieties, or mixtures of these and Grimm.

What about the hardy commons? Of the 77 samples labeled "common," 10 percent had nonhardy plants mixed in.

Seedsmen cannot be held responsible for all of these mixtures. Seed not subject to the strictest controls tends to become mixed.

There was one encouraging finding. Only one sample of the certified Ranger and Buffalo had off-types. The reason is that certified growers must "start over again" with pure foundation seed after 1 or 2 generations.

The use of certified seed seems to be the best assurance that you are getting what the label says.

You can spot nonhardy alfalfa. Typical plants in the late fall—hardy (right) is dormant, nonhardy (left) will winterkill

Purchased as Grimm, look what grew in this test. Notice several plants show typical nonhardy growth, indicating some mixing

Purchased as certified Buffalo. This test was typical of certified alfalfas—all but one of the samples were true to type

STAR OF ALL DIESELS

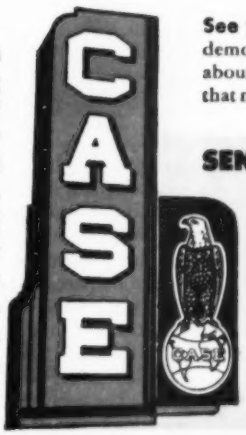
MODEL "500"

NEW CASE DIESEL

FIRST WITH POWER STEERING

★ **"Powrcel" Controlled Combustion** ★ **Direct Electric Starting with Diesel Fuel** ★ **Six-Point Fuel Filtering System** ★ **Single-Plunger Injection Pump** ★ **5-Plow Power** ★ **Dual-Valve Constant Hydraulic Control** ★ **Constant Power Take-Off** ★ **7-Bearing Crankshaft** ★ **6-Cylinder Engine**

Save precious hours . . . keep labor and production costs down, yields up . . . with this big, fast-stepping 5-plow tractor—the new Case Diesel. Enjoy the ease of Power Steering for short turns and long days, especially in soft or rough ground. Get smooth, quiet power and clean burning at all loads with "Powrcel" controlled combustion. Thrill to instant starting directly on Diesel fuel by merely touching a button. See how the 6-point filter system protects against dirt or water in the fuel . . . how the single-plunger injection pump with distributor feeds fuel evenly to all six cylinders. Best of all, you'll have economies in maintenance never before achieved in a Diesel tractor . . . plus the benefit of Diesel fuel economy . . . and many other features of advanced design.



See your Case dealer now for a personal demonstration in your own fields. Ask him about big, new Case plows, disks and drills that match the power of this star of all Diesels.

SEND FOR THE FULL STORY

Get all the facts and pictures. Mark here or write in margin any size tractor, any kind of implement or farm machine that interests you. Send to J. I. Case Co., Dept. C-774, Racine, Wis.

- ☐ Case Diesel Tractor
- ☐ 18-ft. One-Way Plow
- ☐ New Wheel-Type Tandem Disk Harrow
- ☐ 5-bottom Case Centennial Plow
- ☐ New Lister-Type Press Drill

Name _____

Post Office _____

RFD _____ State _____

now!

Pinch-Pleating is Easier!

Discover how easy it is to make draperies at home! . . . How satisfying to be able to choose precisely the color and fabric you want! Now . . . with Conso Bestpleat pleater tape you have the professional look of expensive custom-made draperies . . . *in minutes!*

Bestpleat has those wonderful woven pockets that can't rip out. Bestpleat is permanently sagproof, cleanable and washable. Just stitch Bestpleat to the top of your fabric. The Conso hooks with the built-in pinch AUTOMATICALLY make sharp pinch, box or cartridge pleats. No mathematics! No measuring!

And here's another time and work saver: just remove the hooks, and presto! you have a flat surface to wash, dry-clean or iron. No wonder women call Bestpleat *the best pleater tape ever made!*

Ask for Bestpleat in drapery departments everywhere.

Send for

"1001 Decorating Ideas" Edition #10 — 64 pages of new decorating ideas and instructions by nationally famous interior decorators. At drapery departments everywhere or send 25¢ in coin to Dept. SF-3.

CONSOLIDATED TRIMMING CORPORATION
27 West 23rd Street, New York 10

Whatever your age—

Feel better by eating better

By Ruth M. Leverton

Often when a senior citizen (anyone over fortyish) hears about the tremendous importance of good food to good health he is inclined to say, "It's too late for this information to do me any good, it's the young people who should be learning about this."

It's never too late to improve your own well-being by improving your diet. True, prevention is better than cure and the longer you put off eating well, the longer it will be before you are nutritionally top-notch. Even so it's never too late to start to eat better and feel better.

It's anyone's privilege to go a bit easier on farm work and chores as he approaches his senior years. Also, it's good sense. But this shouldn't mean going limp and miserable, breaking at the seams, and languishing in senility. Too often poor eating habits, usually of long standing, are the cause of early aging. Fortunately, when such eating habits are corrected, older folks are perky, helpful, and happy again.

The eating habits of older people have some of the same faults as the habits of younger adults. In general they don't use enough milk (this is especially true of farm people), they don't eat enough of the high-protein foods, and some eat too many calories and so are overweight.

Many people think milk is important chiefly because it supplies calcium for growth and for upkeep of the bones. They think that as they grow older they don't need milk. Nothing could be further from the truth. If our food doesn't supply calcium for upkeep, then calcium is taken from the bones for this purpose. The bones then become thin and weak and sometimes deformed. The doctor uses the word "decalcified" to describe such bones.

Milk has many other nutritional values besides calcium. It supplies the important vitamin, *riboflavin.* No vitamin has more widespread action in the body than riboflavin. It is involved when the cells use oxygen—a very vital function indeed! When the diet does not supply enough riboflavin the deficiency makes the skin at the corners of the mouth crack, it causes scaliness of the skin, especially around the nose, and it makes the eyes sensitive to light and they appear red and swollen.

Our best food source of riboflavin is milk—whole or skim, fresh or dried or evaporated. Three glasses of milk a day, in addition to the other foods in a good diet, supply enough riboflavin to keep the eye tissues and skin healthy, and to aid the cells in using oxygen. No other foods in reasonable amounts can supply enough riboflavin for these needs.

Now for the protein problem: Some senior citizens feel that they don't need "much meat" or other protein foods. Some even think meat is hard to digest or hard on the kidneys. This is not true except in certain uncommon diseases.

Protein foods give the body substances essential to life and which no other foods can supply. Again, if the diet is deficient in protein, the body will tear down its own tissues to get the materials necessary to maintain life. Listlessness, fatigue, lack of vigor and zest result from a diet which supplies insufficient protein for healthful daily upkeep. Women are worse than men about having too little protein, especially after 40.

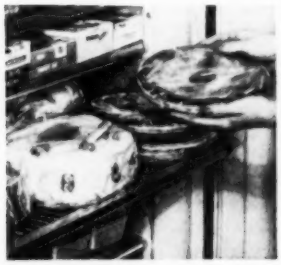
If you're not sure you're getting enough protein each day, check the chart on page 113 to see how much protein you need and the foods that best supply it.

Let's check up on your protein supply. A score of 100 equals the amount of protein you need each day. Different foods have different scores, depending on how much protein they supply. The more they supply, the higher is their score.

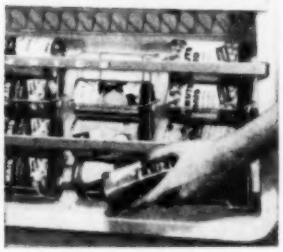
[*Turn to page 113*

Everything within easy reach when you own a

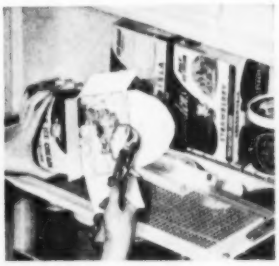
NEW G-E UPRIGHT FREEZER



Handy, sliding shelves!
Adjustable, sliding shelves glide out, making it easier to reach things stored at back of freezer.



Fruit juice at your fingertips!
New frozen juice can dispenser keeps 16 cans of frozen fruit juice within easy reach.



Ice cream ready for serving!
Special Ice Cream Conditioner keeps a gallon and a half of ice cream at scooping temperature.

A place for bulky packages!
A hidden Stor-well at the bottom of the freezer comfortably holds bulky items like hams and roasts.

ENJOY complete freezer convenience in your kitchen with the new G-E Upright Freezer. Every feature, from slide-out shelves to the handy frozen fruit juice dispenser, helps make the job of food storage and preparation *faster* and *easier*.

So very dependable, too!

Every G-E Freezer has the same type of sealed-in refrigerating mechanism that has kept 3,500,000 G-E Refrigerators operating so efficiently for periods of 10 years and longer.

Choose from a complete line of upright and chest models. Prices begin at $299.95. Be sure to visit your G-E dealer soon. General Electric Company, Appliance Park, Louisville, Kentucky.

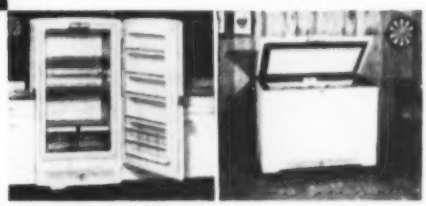
Upright Freezer

A new, sensible way to buy freezer space!

Holds 525 pounds! Yet this new 15-cubic-foot G-E Upright Freezer takes less than one square yard of floor area. Price $519.95.

ABOUT **$5.50*** WEEKLY

**After small down payment. See your G-E dealer for exact terms. Prices and specifications subject to change without notice.*



For compact convenience in the kitchen—
11-cu-ft G-E Upright Freezer

For roomy, bulk storage elsewhere—
11-cu-ft G-E Chest Freezer

Here's a wonderful solution for those who need extra freezer space, but who haven't space for one of those "box-car-like" freezer chests. You can buy *both* G-E Freezers shown here and get 22 cubic feet of storage space. Ask your G-E dealer about this offer!

GENERAL ELECTRIC

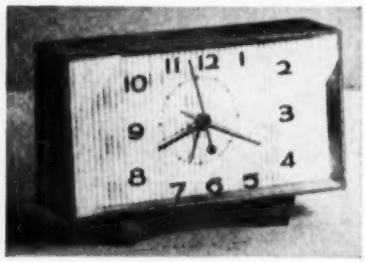
What's new *in homemaking*®

"Prop" paint mixer fits over half the paint can, stirs paint without mess. Order for $1.95 postpaid.—*International Allied Industries, Box 202, Hialeah, Florida.*

Two-way opening door is big news in this refrigerator! Door will open in either direction according to the side of the V-shaped handle you pull. Handle is in the center of the door (see photograph at left). Mechanism prevents both sides from opening at once. At Philco dealers.—*Philco Corporation, Philadelphia, Pennsylvania.*

Photographs: Fletcher

◀ **Semicircular shelves** in this refrigerator rotate Lazy Susan fashion to make it easy to reach all the items stored on it. The shelf can be adjusted to varying heights, even when loaded. At appliance dealers. —*General Electric, Louisville, Kentucky.*



"Decor" electric alarm clock has unusual "3-dimensional" look. Numerals on crystal cast shadows on textured dial. At stores, $6.95, plus tax.—*Telechron Dept., General Electric, Ashland, Massachusetts.*

◀ **Automatic wallpaper paster** puts the paste evenly on the back of paper as it is unrolled. Paste is poured in metal box, paper put on supporting rod that fits trimmed rolls up to 22 inches. Only other tools needed are razor blade and brush. At $4.95 in department stores.—*Nu Way Manufacturing Company, 3912 Germantown Avenue, Philadelphia 40, Pennsylvania.*

More on page 183

"So you've just baked a cake!"
says
BETTY CROCKER OF GENERAL MILLS

And now you're wondering how to ice it! I do hope you're not *worrying*. Like the bride who told me the other day: "I love to make cakes, especially your cake-mix cakes, Betty Crocker. They're so easy! But I get a panicky feeling when the cake's all baked. I'm not much good at icings!"

"Nobody has to be," I hurried to tell her. "There are so many good ways to serve cake these days. Just plain. Or with ice cream on top. Or whipped cream. Or any kind of fresh or canned fruit. Or chocolate sauce. Or even jelly! Why, someone told me that in her home they eat warm cake and butter—like bread and butter!"

Suppose you do want an icing! Here's one that's easy!

CHOCOLATE BUTTER ICING

3 cups *sifted* confectioners' sugar
⅓ cup soft butter or other shortening
3 sq. unsweetened chocolate (3 oz.), melted
About 3 tbsp. cream
1½ tsp. vanilla
Blend sugar, butter. Add chocolate, cream and vanilla; stir until smooth.

Chocolate Butter Icing tastes wonderful on cake made with Betty Crocker Chocolate Devils Food Cake Mix like the one in the picture, or on my White or Yellow Cake. No matter what icing you like, it will taste its best on top of any one of our Betty Crocker Cake Mixes.

For our mixes are just your kind. We use just the rich, creamy shortening, fine flavorings, and finest SOFTASILK Cake Flour you'd pick out yourself. You get an extra-light and tender cake, because you add your own fresh eggs. And you get a perfect cake . . . yes, a perfect cake . . . we guarantee it . . . every time you bake!

Bake up a chocolate cake like the one in the picture across the way tonight, why don't you? Wait till *your* favorite family sees that!

Betty

PERFECT! Yes, we DO mean perfect. You be the judge. If a cake you make with a Betty Crocker Cake Mix is less than perfect, write Betty Crocker, Box 200, Minneapolis, Minn., and General Mills will send your money back!

Crocker says: I guarantee a perfect cake every time you bake

cake . . . after cake . . . after cake!

Be an Early Bird

WITH YOUR SPRING PAINTING!

Colors: Ageratum (158) and Seamist (94) – SPRED SATIN *on walls and ceiling,* SPRED GLOSS *on woodwork*

It's so easy to decorate now with Stay-Fresh Colors in SPRED SATIN

SPRED *Color Twins*

– two ideal finishes for pre-Spring painting! Each creates a tight 100% latex film that resists dirt – in popular colors that stay bright and clean season after season.

SPRED SATIN – a soft satin sheen for walls, ceilings and for woodwork, too. A luxury finish that is washable, scrubbable, durable. Ready to use – just stir and apply.

SPRED GLOSS – the easy-to-apply enamel for kitchens, bathrooms, all woodwork, wherever you prefer a rich luster finish. Not a glaring shine, but a subdued gloss. Available in matching colors to SPRED SATIN.

Copyright 1954, The Glidden Company, Cleveland 2, Ohio

MORE BEAUTIFUL COLORS than you can imagine! See the giant color card at your SPRED dealer's – over 180 gorgeous pastel and deep colors – all guaranteed washable!

PAINT WITH WINDOWS CLOSED! No painty odor – no fumes! You can flow on SPRED SATIN with brush or roller. Start or stop anywhere. Dries in 20 minutes without laps or brush marks.

FASTEST CLEAN UP! Just rinse out brush or roller under the water tap. And you can wipe up floor spatters quickly with a damp cloth.

Glidden

Pacemaker in Paints

Let a home pasteurizer protect

Your family's health

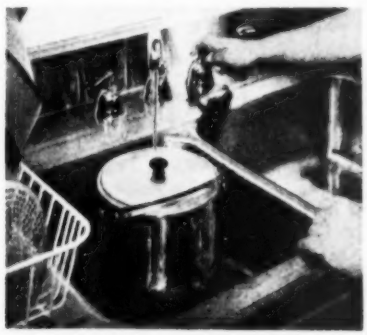
By Gloria Albritton

More and more farm families who produce their own milk feel that a home pasteurizer is as necessary a part of their kitchen equipment as the toaster or the electric mixer. Pasteurization of milk (heating and holding at 143 degrees for 30 minutes) is the only way to be sure the milk you drink does not carry disease germs. For only about 1 cent a gallon, you can have this protection. Bertha Vick, a 4-H girl of Brookings County, South Dakota, uses a pasteurizer every other day in her home. Here she shows how simple the pasteurizer is to operate.

Fresh milk is first strained into the clean milk pail outside the electric pasteurizer. Both 1- and 2-quart sizes can be bought

Covered milk bucket then is placed in the pasteurizer, the lid closed, and simple dial set. It buzzes when milk is pasteurized

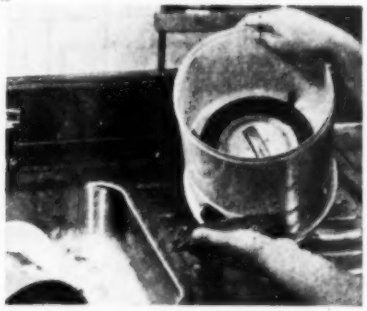
Filter is removed from the strainer. Bertha rinses the parts in cold water before washing. This prevents scum forming



Rapid cooling of milk is accomplished by running cold water over the closed milk bucket after pasteurization period is up

Photographs: Reynolds, Photography, Inc., Art Edwards, Hopkins

Pasteurized milk then is funneled into throughly clean, scalded milk bottles. Next, foil caps are placed on bottle tops



Pasteurization is complete, but Bertha isn't through. She carefully wipes inside of the pasteurizer and washes the bucket

More on page 127

Bringing Up Baby

HINTS COLLECTED BY
Mrs Dan Gerber
(MOTHER OF 5)

Mrs. Dan Gerber

A question new mothers often ask: "How much water does a tiny baby need?" The answer varies, of course, with the baby. Some babies start drinking water the first week, others have little use for it during the first few months. If you find your child likes water, offer a sip several times a day, between meals. Don't urge it upon him. Little ones are mighty smart when it comes to knowing their own needs.

Precautionary P. S. Be sure baby's water is always boiled. And it's a good idea to have your water supply checked for purity from time to time.

Shortly after birth, baby needs a daily ration of Vitamin C . . . for the development of sturdy bones, healthy tissues and gums. Guaranteed Vitamin C value is one of the things you can count on in Gerber's Strained Orange Juice. Made from tree-ripened oranges, selected for mild, fresh-fruit flavor, appealing natural color. Carefully pasteurized, with uniform quality season in and season out.

Bath chat. A soft cotton glove, worn on your holding hand, will keep baby from slipping out of your grasp during the bath session. When baby graduates to the big tub, a rubber mat will save him from sliding all over the slippery bottom.

As young babies grow so rapidly, additional blood-building iron becomes more and more important. Gerber's Strained Egg Yolks provide an excellent source of iron as well as Vitamin A. And babies love the special creamy-smooth texture that feels nice on little tongues, and the delicious fresh-egg flavor. Heat-sterilized for baby's protection. Economical for you: no wasted egg whites!

No charge! Samples of Gerber's four Cereals—Rice, Barley, Oatmeal and Cereal Food are yours for the asking. Write: Mrs. Dan Gerber, Dept. SF3-4, Fremont, Mich. In Canada, c/o Gerber-Ogilvie Baby Foods Ltd., Niagara Falls, Canada.

These 5 features...

1 Sealed Roller Bearings... easy pulling, smooth running, more years of service.

2 Floating Rollers . . . ball and socket mounting permits flexibility all ways—absorbs shock.

3 Heavy Angle Steel Frame and molded end brackets mean permanent alignment, uniform penetration from end to end.

4 2-inch Axles... up to 85% stronger than used on ordinary pulverizers. Resists flexing and distortion.

make Brillion the most efficient and durable pulverizer you can buy

5 3-way Drawbar Pull . . . provides accurate trailing behind tractor, seeder or harrow. Doesn't skid or whip in the turns, doesn't slide on the hillsides or contours.

Brillion Pulverizers are designed and built for fast tractor speeds. They have the strength and durability to take heavy continuous going . . . the weight, balance and stability to hold to their work, penetrate uniformly on level land or on fields that are rough and rolling.

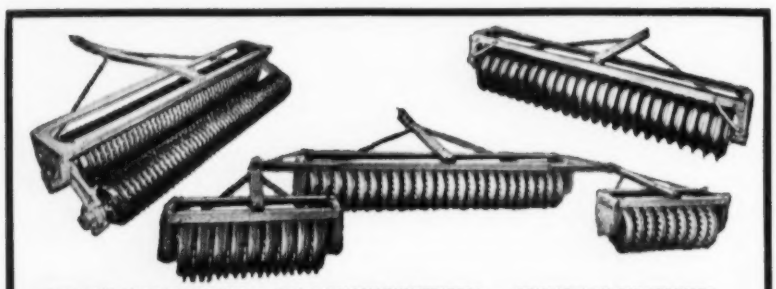
This faster operation and longer life are the result of smooth running, easy pulling sealed roller bearings . . . ground-hugging floating rollers, the strength and resistance of larger axles. It is in the permanent alignment of more durable frames . . . the perfect trailing of 3-way drawbar pull.

Separately and in combination these five features give you more years of service with a Brillion . . . more thorough crushing action in tough clods, better pulverization in fewer trips over your fields.

They cut maintenance and field time to a bare minimum . . . eliminate annoying down-time because a Brillion is built up to its job in every construction feature.

See your Brillion dealer for all of the longer-life and serviceability facts. Ask for a demonstration. For folder, write The Brillion Iron Works, Inc., Dept. P-1-3, Brillion, Wisconsin.

Brillion PULVERIZERS



BRILLION SURE-STAND PULVERIZER converts to seeder. 6 notched wheels per foot of rolling width. Comes in a variety of sizes.

BRILLION LSM PULVERIZERS; sprockets add more crushing action. 15-inch wheels. 10- to 22-foot rolling widths. Single or triple gangs.

BRILLION LG PULVERIZERS... heavy-duty model. 4-inch axles, 18-inch wheels. Sprockets available. 7- to 11-foot singles, 14- to 22-foot triples.

Don't blame for

By Duane Acker

Are the new developments in swine nutrition actually producing poorer quality pork? Some people feel that antibiotics in hog feeds cause fatter, less desirable carcasses. Here's what we know about this problem so far:

Feeding antibiotics. It is now generally accepted that sufficient levels of the right antibiotics are necessary in hog feeds for best growth.

Antibiotics help control disease and get little pigs off to a quicker, faster, and healthier start. Antibiotics make for more rapid gains in growing-fattening hogs. In the end, antibiotics make more money for farmers.

But, is the farmer who feeds antibiotics producing poorer quality carcasses? Did the antibiotic feeding, that resulted in much faster gains, make the hogs *fatter*, too? If so, that's one strike against the feeding of antibiotics—a big strike!

Too-fat pork. Much of the pork found in meat markets and on super-market counters has been too fat all along. Many a housewife has handled a piece of "too-fat" pork from a self-serve counter, then laid it back and picked up a piece of beef, veal, or lamb.

During the last four years, some meat packers have felt that hog carcasses rolling along the rail have looked fatter. But the packers have had no way to confirm their beliefs. About the only sweeping change in hog production recently has been the feeding of antibiotics and vitamin B_{12}.

To find the answers, the agricultural experiment stations started working on the problem.

In 1950, the workers at the University of Alberta in Canada reported that APF —later found to be an antibiotic plus vitamin B_{12}—in hog rations resulted in faster gains which they were afraid caused fatter carcasses.

However, the researchers haven't been content with just looking at the carcasses or taking a few preliminary measurements. In fact, they've spent about as much time making sure they're using the right methods of measuring the amount of fat as they have doing the actual experimental work.

Test results. Besides using specific gravity as a measure, Iowa State College has weighed the lean and fat cuts, measured the length and depth of the carcass, back-

antibiotics too-fat hogs

fat thickness, and thickness and width of the tenderloin muscle. Other measurements have also been taken. Since antibiotic feeding is so widespread, researchers at Iowa State wanted to use every measurement possible to help determine whether or not antibiotics are detrimental in any way to hog-carcass quality. *And Iowa State researchers don't think antibiotics are at fault.*

Results not the same. Of course, not all the experimental results are the same. Back in 1950, workers at Purdue reported that when APF was fed in a supplement to hogs on pasture, those hogs had a 10-percent thicker layer of backfat than the hogs not receiving APF.

In 1951 and 1952, the Alberta, Canada, workers found they got fatter, less-desirable carcasses when they fed either aureomycin or terramycin throughout the finishing period. But, there was no adverse effect on carcasses when antibiotic feeding was stopped at 75 to 125 pounds. Later work at Purdue has given similar results.

Antibiotics improve carcass. More recently, the University of Wisconsin reported that antibiotic feeding actually *improved* hog carcasses. Carcasses from pigs fed antibiotics had a greater percentage of the important, higher priced primal and lean cuts.

Several studies by the Iowa experiment station have failed to show any marked increase in fatness as the result of feeding antibiotics. Excellent growth response has been obtained in the experimental tests.

In three tests involving the slaughter of 126 pigs, where part of the pigs got 5 milligrams of aureomycin or terramycin per pound of ration, there was no marked adverse effect on carcass quality. After all the measurements were taken and compared, no significant difference between the groups showed up.

There the problem stands. Work has been going on for several years, and has not shown conclusively that antibiotic feeding results in fatter, less-desirable swine carcasses.

For now, it seems that we should go right on following the latest recommendations in swine nutrition for the fastest and most economical hog production. Antibiotics certainly contribute to these two features and it has not been proved that they are detrimental to the carcass quality of hogs. **END**

Seeding the Brillion way within this ½-inch Life Line means a

SURE stand and a GOOD stand

Research and field experience prove it! Up to 54% more grass and legume seed grows when planted in the top ½-inch of soil — the "life line" zone of your field. That's how you profit with a Brillion Sure-Stand Seeder.

In one trip over the field, the Brillion crushes clods into a fine seedbed. It sows evenly . . . then firms the earth around each seed. No seed falls into barren air pockets. None is smothered by deep planting or covered by clods where it can't grow. The Brillion works equally well with fine, coarse or chaffy seeds like brome or fescue.

As a result, you double your chances for a sure catch of grass . . . cut your seed bill in half, save time and labor, and reduce the risk of rotation failures. See your Brillion dealer for a demonstration. Make this *your* year to *save* with a Brillion Sure-Stand . . . the first truly new grass seeder improvement in years.

Users say BRILLION PREVENTS ROTATION FAILURES

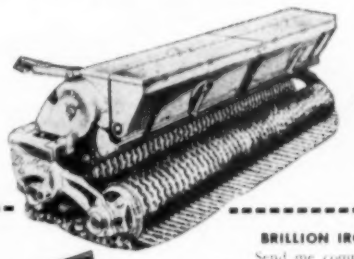
"We have had wonderful results in getting good stands with less seed than the old drill method." — *Virgil Estes, Fayetteville, Ark.*

"Saves seed and gives added insurance of stand even in dry springs when a stand might be lost due to lack of moisture." — *A. W. Lumpkins, Lusanville, Ind.*

"I am able to save a great deal of seed and am getting a much better stand." — *John Simons, Jr., Bristol, Pa.*

"Our Brillion really does a swell job in producing better grass stands." — *Ed. Carey, Marion, Ohio.*

"Last fall I renovated 10 acres of hay field. Two weeks after the hay was off, the new alfalfa was up. Now we have a stand like a lawn. It's perfect." — *J. E. Houghton, Lancaster, Calif.*



Brillion
SURE-STAND GRASS SEEDERS
5'4", 8' and 10'8" models

Free Grass Book!

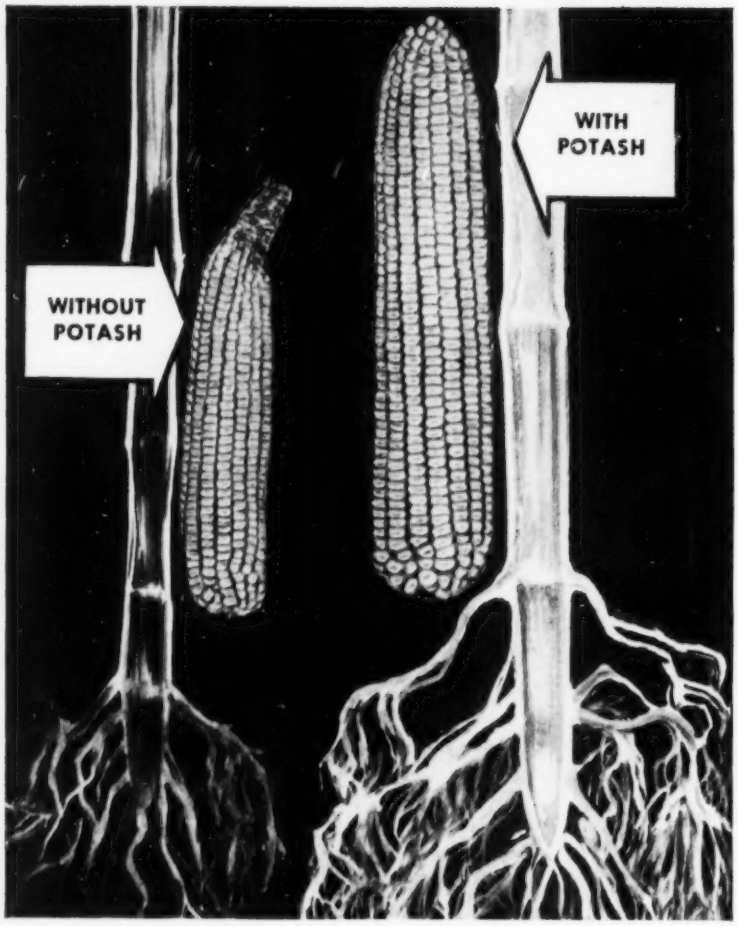
BRILLION IRON WORKS, INC. Dept BG-1-3, Brillion, Wisconsin

Send me complete information on the Brillion Sure-Stand Seeder. I seed about ..... acres for hay and pasture each year.

Name .....

Town ..... RFD .....

County ..... State .....



POTASH makes the difference

Side by side field tests prove potash is a *must* for *bigger* yields, *bigger* profits.

Potash is the *lifeblood* of any growing plant. Without it the health, vigor, quality and yield of your crop suffer. Other vital plant functions, such as root, leaf and stalk development, are handicapped. Without proper nutrition the plant eventually burns itself out.

When liberally supplied in your fertilizer, Potash produces heavy, well-filled ears . . . reduces disease and insect damage . . . minimizes lodging . . . increases feeding value. Consult your local agricultural adviser for correct amounts. Remember, *more* Potash means *more* profits.

SEND FOR THIS FREE BOOKLET

This Plant Food Utilization Booklet shows how your crops remove valuable plant foods from the soil . . . helps you better understand your fertilizer needs. For your copy, write to address below.

K2O *Symbol for bigger yields . . . bigger profits*

AMERICAN POTASH INSTITUTE, INC.
Dept. C16, 1102 Sixteenth Street, N. W., Washington 6, D. C.

MEMBER COMPANIES: American Potash & Chemical Corporation • Duval Sulphur & Potash Company • Potash Company of America • Southwest Potash Corporation • United States Potash Company

What to do about TGE

Recent pig troubles with transmissible gastroenteritis, or TGE as it's commonly called, have supplied some new information on this disease.

We now know that TGE *can* affect many herds in a neighborhood. In other words, the disease can be spread. Formerly, TGE was thought of as mostly an individual herd problem.

The best insurance against this disease, right now, is to *avoid bringing it onto your farm*. Do this by: (1) keeping visitors out of the hoghouse and lots when sows are farrowing; (2) keeping trucks and other equipment used in handling feed, bedding, or water at a safe distance from the hoghouse and lots; (3) avoid bringing anything from an infected farm to a non-infected one during the farrowing period.

Recent findings show that some resistance to TGE results from one attack of the disease. It's doubtful, however, if this immunity or resistance lasts for longer than several months. It's a common occurrence for sows that have lost their pigs from TGE to successfully raise the next litters, **particularly if the sows are rebred soon after the pigs die.**

If several months go by after the pigs have died, the sows may not be any more resistant to TGE then where no previous exposure had occurred. Some immunity apparently develops in the sow and is then transmitted to the unborn pigs.

A limited amount of work has been done to see if immunity can be developed by intentionally exposing the sow during the gestation period. This work has been too limited as yet to show how effective artificial exposure is in developing resistance to the disease.

If an outbreak of TGE does occur on your farm, what should you do? First, isolate the sick pigs as soon as possible. Then, follow a strict sanitation program.

No known cure for TGE. After an outbreak, go ahead and rebreed the sows for the next pig crop. High death loss from TGE rarely occurs in two successive pig crops. However, some time should be allowed to elapse between farrowings. Continuous farrowing . . . having 6 or 7 different bunches of sows farrow during the year . . . is likely to keep the disease going on affected farms. But, even where continuous farrowing is practiced, death losses from this disease usually decrease with time.—*L. P. Doyle.*

Whenever you write us about your *Successful Farming* subscription, enclose an address label clipped from a recent copy. This will help us send you a prompt reply. Address inquiries to Service Division, *Successful Farming*, Des Moines 3, Iowa.

The Best Pigs of 1953
Had a Head Start with

Sugar-Coated Pig Kisses

Staley's Sugar-Coated PIG KISSES were a sensation last spring. Hog feeders everywhere read about the experiments at Iowa State College, where sugar-coated pellets were developed and first used. And thousands rushed to Staley feed stores to be among the first to try PIG KISSES in their own feed lots.

Now, a year later, it's time to ask: Did sugar-coated PIG KISSES live up to their promises?

All over the cornbelt, feeder after feeder answers emphatically, "Yes!"

For example, Clarence Beutler, Jr., of Bancroft, Nebr. fed Staley PIG KISSES to a litter of 12 Hampshires ...took home the Grand Champion Ribbon for a market litter at the big Midwestern Ak-Sar-Ben 4-H Livestock Show at Omaha. "Pigs got off to a faster start than ever before . . . stayed in top condition," says Clarence.

Other feeders everywhere tell similar stories: Pigs started eating PIG KISSES soon after farrowing . . . gained up to twice as fast as any pigs ever gained before . . . often weighed as much at 30 days as other pigs 8 weeks old.

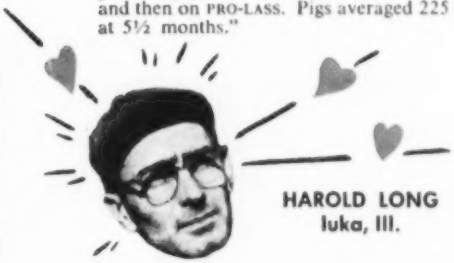
If you haven't tried PIG KISSES, get a supply from your Staley feed dealer today. Feed PIG KISSES in a creep when pigs are a week old. Pigs need only a few KISSES at first. Just a few KISSES meet most of a baby pig's requirements for one day. By 3 weeks, when sow's milk decreases, pigs will be eating KISSES heartily. When pigs are about 5 weeks old, you can take away PIG KISSES and let them eat Staley PIG MAMA and grain with the sow.

Sugar Inside and Out!

Now . . . PIG KISSES are even sweeter than ever . . . more appetizing than ever! Now . . . each PIG KISSES pellet has a rich, thick coating of sugar on the outside . . . a sweet, tasty helping on the inside, too. Today's PIG KISSES are based on latest research by Iowa State College . . . promise even more amazing results than the PIG KISSES which took the cornbelt by storm last year. Be sure to get the genuine. Only your Staley feed dealer can supply you.

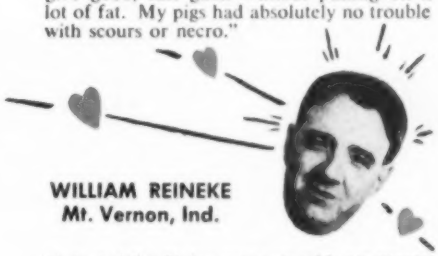
STERLING CATES
Henderson, Ky.

"We put 120 pigs on Staley's PIG KISSES and had no trouble with scours or necro. The pigs were farrowed from sows fed PIG MAMA, and the average was eight in each litter. We put the pigs on PIG MAMA after PIG KISSES and then on PRO-LASS. Pigs averaged 225 lbs. at 5½ months."



HAROLD LONG
Iuka, Ill.

"PIG KISSES gave my pigs such a good start, I had the Grand Champion and Reserve Grand Champion Barrow at the Illinois State Fair. I like PIG KISSES because they give good, fast gains without putting on a lot of fat. My pigs had absolutely no trouble with scours or necro."



WILLIAM REINEKE
Mt. Vernon, Ind.

"I started the Staley program with PIG KISSES and followed it all the way through. In 5½ months, my pigs weigh around 220 lbs. Of 200 pigs farrowed, 180 were weaned. No losses were due to disease. I don't hesitate to recommend the Staley program from start to finish!"

CLARENCE BEUTLER
Bancroft, Nebr.

"PIG KISSES helped me win the grand champion ribbon for a market litter at the Midwestern Ak-Sar-Ben 4-H Livestock Show at Omaha. I started the 12 Hampshires on KISSES and they really went after them. Pigs got off to a faster start then I've ever seen before . . . stayed in top condition."

staley FEEDS

Staley Milling Company

Kansas City 16, Mo.
Branch Plant: East St. Louis, Ill.

No. 551-54
Copyright 1954
Staley Milling Co.

Here is proof of the greatest scientific discovery in toothpaste history—proof that Colgate Dental Cream with Gardol,* Colgate's exclusive, new, miracle ingredient, gives lasting protection against tooth-decay enzymes!

ONLY NEW COLGATE DENTAL CREAM HAS THE CLINICAL PROOF

that brings new hope to millions for

Lifetime Protection Against Tooth Decay!

Actual use by hundreds of people has proved the long-lasting protection of New Colgate Dental Cream with Gardol! Tests supervised by leading dental authorities—for a full year—proved this protection won't rinse off, won't wear off! Proved just daily morning and night use guards against decay-causing enzymes every minute of the day and night!

A JURY OF DISTINGUISHED DENTISTS HAS EXAMINED THE EVIDENCE! Documented facts, recently published in an authoritative dental journal, have convinced these dentists that Colgate Dental Cream with Gardol is far more effective against decay-causing enzymes than any other toothpaste. And because Gardol is the *only* long-lasting anti-enzyme ingredient with clinical proof, these dental authorities agree that New Colgate's with Gardol gives the surest protection against tooth decay ever offered by any toothpaste.

*Sodium N-Lauroyl Sarcosinate

No Other Toothpaste Offers Proof of Such Results!

Cleans Your Breath While It Cleans Your Teeth!

LARGE 27¢ GIANT 47¢ ECONOMY 63¢

For LIFETIME PROTECTION AGAINST TOOTH-DECAY ENZYMES

Photograph: Swegle

This 315-foot well ran for 1,400 hours last summer, pumped 2,000 gallons hourly

Deep wells being drilled as drouth insurance

About the busiest men serving farmers the past few years have been well drillers. In Finney County, Kansas, 60 to 70 wells have been drilled for irrigation during the past year. Here is a typical well on the Ronald and Charles Olomon farm.

The Olomons irrigated a half-section—mostly milo, wheat, and alfalfa. Surface irrigation was used. The milo yielded 100 bushels per acre—without the new well it would have made around 20 bushels. This yield boost alone paid for the well.

The well, engine, and pump cost in the Finney County area runs from $8,000 to $12,000. The one above cost $8,800.

X-disease—

passed from cow to calf through milk?

Recent studies at the Nebraska Experiment Station indicate that X-disease *may* be passed to calves through milk.

Two calves from a cow which had symptoms of the disease continuously for 5 years developed the same thickened skin condition. The calf from another cow was given whole milk from the affected cow and also developed thickened skin.

Further tests suggested that the factor causing X-disease may be present in the skim milk but not in the cream. When one calf was given skim milk from the affected cow and another calf was given the cream, only the calf receiving the skim milk developed abnormal skin.

Aldrin spray . . .

stopped rootworms

One pound of aldrin in 10 gallons of water per acre sprayed on the surface of the ground before plowing made the difference you see at right, below.

This cornfield, photographed last fall, belonged to Howard Waters, Des Moines County, Iowa. The cause of the trouble was rootworms.

At right you see corn which went around 75 bushels per acre. The down corn at left made 15. The field was four years out of bluegrass sod and had been corned all four years—a setup for rootworms. Other chemicals which will do the same job include chlordane, heptachlor, dieldrin, and endrin.

Photograph: Burlington Hawk-eye Gazette

Cure for No. 1 red-clover pest

Researchers at the Ohio Agricultural Station have come up with the first easy and practical control of the clover root borer. The insect feeds on the clover crown, and at the same time, provides an entry for anthracnose and other diseases.

First-harvest-year red clover is severely attacked. In areas where it is held for 2 harvest years, nearly 100 percent of the roots are infested the second year. Because of this, most farmers now regard red clover as a natural biennial (a plant which grows two seasons and dies).

Actually, red clover should stand for many years except for damage by root borers and diseases they help introduce.

In 1951, red clover was band-seeded at Wooster, Ohio, using 300 pounds of 0-20-20 fertilizer per acre. From $\frac{1}{4}$ to 2 pounds of lindane or aldrin were mixed with the 300 pounds of fertilizer. In 1952, at the time of the second cutting, there was as much as an 82-percent reduction in root borers in the treated areas, and an increase in clover yields of up to 58 percent. Plots which had no insecticide added to the banded fertilizer, yielded less than $\frac{1}{2}$ ton per acre at second cutting.

Although further tests are necessary, the band-seeding method is the best method yet devised for root-borer control.

Model 21K12, 21-inch screen, walnut finish, $299.95. Mahogany or Limed Oak slightly higher.

New Motorola TV design stops glare and tone-loss!

Model 21T14, 21-inch screen, ebony finish, only $189.95.

New picture clarity at eye level. New tone clarity at ear level. That's what Motorola's amazing new Glare Down /Sound Up design does for you! Motorola's engineers have tilted the screen *down* to stop reflected glare . . . tilted the speaker *up* for fuller tone. Fashion Academy Award styling. Top reception, even in distant locations. And remember: every Motorola TV set made today will also receive *color* telecasts in improved black-and-white, for years of big-screen entertainment!

Better See The Motorola TV Hour, ABC-TV, Tuesday nights in most areas

Better See **Motorola TV**

with DOUBLE-POWER PICTURE

Prices include Federal Exc. Tax and full year warranty on all parts, tubes and picture tube. UHF optional, at extra cost. Slightly higher South and West. Subject to change without notice. © 1954, Motorola Inc.

Do 5 gardening jobs in 1 operation

PLOW • DISC • HARROW
AERATE • CULTIVATE

BOLENS M-E ROTARY TILLERS

do the work...You have the fun

Tines Guaranteed against Breakage

Till without toil! Completely prepare your garden for planting in one operation...then cultivate, weed and mulch. Plenty of power, and what a performer... turns on a dime. Budget priced for you to enjoy better crops and better soil.

Available with a complete selection of work saving year 'round plug-in attachments for BA Series

MAIL COUPON NOW FOR LITERATURE ON BOLENS OUTDOOR POWER EQUIPMENT

BOLENS PRODUCTS DIVISION
Food Machinery & Chemical Corporation
271-3 So. Park St., Port Washington, Wisconsin
I am interested in:

☐ TILLERS ☐ CHAIN SAWS
☐ TRACTORS ☐ MOWERS

Name _____

Address _____

City _____ Zone ____ State _____

The dairy support problem—*still unsolved*

A year ago, you and every other dairyman in the country appeared before "Judge" Ezra Taft Benson, secretary of agriculture. Here's what happened:

The charge: Spending too much tax money on dairy price supports—at 90 percent of parity. People aren't buying all you produce at this support price, so the extra butter, cheese, and dry skim milk is piling up in cold-storage plants owned by the government.

The sentence: Find a self-help plan within a year. The *judge* put it this way, "You can solve your marketing problems without the kind of government supports which price your products out of the market. We expect you to do so."

The kindly judge then gave you and your cows a bench parole—he continued supports on dairy products at 90 percent of parity for one year.

On March 31, 1954, your year will be up. What kind of a report will your parole officer be able to make? Well, some self-help ideas have been submitted. *None accepted to date.* What now? The judge must accept one of the plans, *or* extend the 90 percent of parity support, *or* drop the support level below 90 percent. Congress will sit as the jury.

What's being done? The most constructive action taken during this year of grace is the increase in spending for advertising dairy products by the American Dairy Association and companies who sell dairy products.

You probably will help finance that—through a set-aside on a 12-month basis of 2 cents a hundred on milk and ½ cent a pound on butter. That money will be taken out of your milk or cream check and go to the A.D.A. Boosting the set-aside from a 2-month basis to a 12-month basis, at half the rate, will buy you these items:

1. More advertising in newspapers and magazines.
2. Jokes and salesmanship for your customers through Bob Hope's weekly radio program on 204 radio stations; and a twice-weekly television program starring Bob Crosby on 50 television stations for 39 weeks of the fall, winter, and spring.
3. Advertising aids to be used by local stores and dairies.
4. Display materials for food stores.
5. Publicity material which will seek free space on food pages and free time on the air.
6. Research on ways to boost consumption of dairy products.

The year-round assessments are expected to at least double the annual budget of the A.D.A.—from $2,000,000 to $4,000,000. The increase could bring the budget as high as $14,000,000.

Another proposed "self-help" plan would require congressional action—and a tidy $500 million loan from the Commodity Credit Corporation to get under way. This is the National Milk Producers Federation plan.

It calls for a federal dairy stabilization board to administer (1) collection of a stabilization fee from farmers on the first sale of their products and (2) use of these funds to buy surpluses and attempt to maintain a stabilized price.

We asked Congressman August H. Andresen, whose dairy subcommittee held a hearing on the plan, what he thought of it. The Minnesota Republican said, "I feel that the plan has considerable merit to it and that it should be studied in detail by the Department of Agriculture and the Committee on Agriculture."

Other plans: Most of the other so-called self-help plans have been presented with the idea of moving dairy products out of storage and into stomachs. These run from food-stamp plans to selling butter at 10 cents less than the support price, with the government standing the loss.

Much of the original optimism and enthusiasm for finding a real self-help plan was killed by the cold, hard fact that all the cows in the country give more milk than people seem inclined or able to buy right now.

Russell S. Waltz, president of the Milk Producers Federation, says that in the absence of a better program, dairymen must have the present 90 percent level of supports continued until March 31, 1955.

Some authorities look to milk-marketing agreements as the answer. They predict these agreements—whereby prices for milk sold for different uses is set by law within areas—will eventually cover practically all the country.

The final solution to the problem is very important to you because the support, in whatever form it comes, will largely determine prices for your dairy products for the next year or two. **END**

COMPLETELY NEW CHEVROLET TRUCKS FOR '54

Loaded with brand-new features to cut costs on the farm!

New Chevrolet trucks for '54 are here to do more work on your farm in less time and at lower cost.

For example, they have new, roomier bodies that let you haul bigger, bulkier loads. You get more done while making fewer trips.

Besides, these great new trucks bring you thrifty new high-compression power that makes short work of tough jobs—and cuts operating costs in the bargain!

But that's only the beginning. You get new cab comfort and convenience, new chassis ruggedness and reliability—plus many, many other big new benefits you want and need.

Plan now to drop by your Chevrolet dealer's and see the farm trucks with the most money-saving new features—new Chevrolet trucks for '54. . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

NEW Engine Power and Economy

Bigger, brawnier "Thriftmaster 235" engine. Rugged, durable "Loadmaster 235" engine. Mighty, all-new "Jobmaster 261" engine* for extra-tough jobs.

NEW Chassis Ruggedness

You'll find heavier axle shafts on 2-ton models . . . bigger, more durable clutches on light- and heavy-duty models . . . stronger, more rigid frames on all models.

NEW Comfortmaster Cab

New one-piece curved windshield gives increased visibility. New, more convenient instrument panel. New Ride Control Seat* offers extra driver comfort.

NEW Automatic Transmission*

You can drive all day without shifting or clutching! Proved truck Hydra-Matic transmission is offered not only on ½- and ¾-ton trucks, but on 1-ton models, too!

Optional at extra cost. Ride Control Seat is available on all cab models; "Jobmaster 261" engine on 2-ton models.

NEW Bigger Load Space

New pickup bodies have deeper sides . . . new stake bodies are wider and longer. And they're set lower to the ground for faster, easier loading and unloading.

NEW Advanced Design Styling

The new front-end design is more massive and sturdy in appearance with handsome new grille. New parking lights are positioned to indicate the full width of the truck.

CHEVROLET

Most Trustworthy Trucks on Any Job!

New, Revolving Shelves *put all foods at your fingertips!*

Holds over 12 cubic feet. Price, $549.95. Available with either right- or left-hand doors.

Model LH-121L
ABOUT
$5.90*
WEEKLY

**After small down payment. See your G-E dealer for exact terms. Prices and specifications subject to change without notice.*

A simple twist, and the back area of the Revolving Shelves is right in front. Furthermore, the inside refrigerator walls are *rounded* to accommodate *extra-large* shelves!

NO MORE fussing or fumbling for you! A gentle nudge of your fingertips, and all the foods ride before you—just like on a Lazy Susan. You see what you want. No more hidden corners. And, there's actually more shelf room than in the previous corresponding model with conventional shelves.

G-E Refrigerators are priced as low as $219.95. See them at your G-E dealer's. Look for his name in the classified telephone directory. General Electric Company, Appliance Park, Louisville, Ky.

Two separate and complete appliances in one cabinet!

True, zero-degree freezer is built just like a floor-type freezer. Has its own separate refrigerating system.

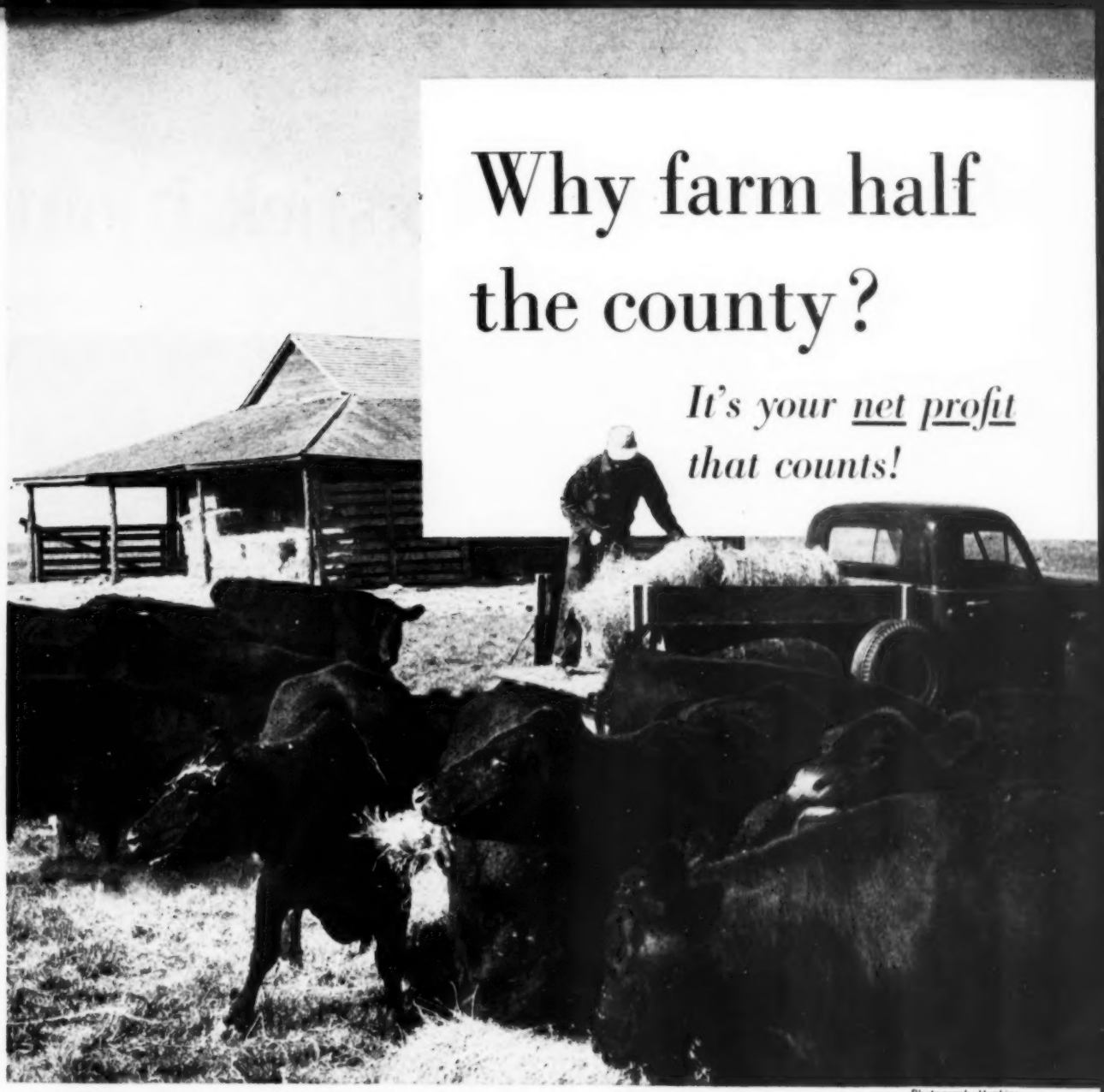
Automatic defrosting refrigerator section is *completely* automatic. No clocks to set; no pans to empty. Foods remain moist-cold.

So dependable! More than 3,500,000 G-E Refrigerators in use 10 years or longer!

GENERAL ELECTRIC

Why farm half the county?

It's your net profit that counts!



Photograph: Hopkins

Put hay-storage barns in the field—to save time in putting up hay, and for fast winter feeding. And the manure is in the field where it belongs, says

B. T. Eaton
Clay County, Missouri

HOW WE FARM

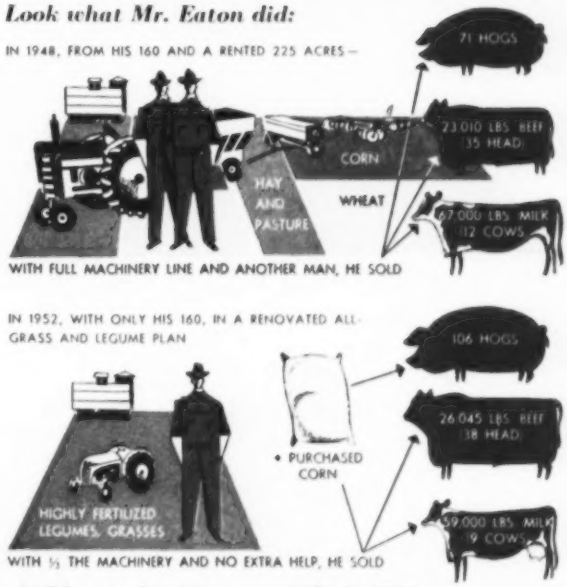
By Wayne E. Swegle

Would you like to buy or rent more land? Most farmers would. Chances are you have enough machinery to take care of more land than you now farm. But, in most communities additional land is hard to come by.

That doesn't necessarily mean you have to settle for less income. Your answer may be *better management* of land you *do* farm. For example, look what B. T. Eaton, of Liberty, Missouri, did with better management of a smaller acreage. He actually made more *net income* from 160 acres and no extra help in 1952, than he got from 385 acres and a son at home in 1948.

Here's his story: Eaton followed an average farming program—with about half of the home 160-acre Clay County farm in corn and wheat—renting a nearby 225 acres while one or more of his three [*Turn to page 76*

Look what Mr. Eaton did:



And he made* more net profit *in 1952

1 How to stick it out

Feed about gone? Ways to stretch roughage, turn 'em out sooner

By John Howard

2 How to get spring

till pasture comes

By Dick Hanson

If last year's drouth left you with a below-normal feed supply, you're probably "scratching" around for feed right now. You *can* make the little good feed you've got go further by mixing it with the right amount of roughage and supplement. If you have *almost* enough feed to last until you normally have pasture available, read the article below for ideas on "hurrying up" those pastures.

Six roughages, and directions for feeding, are listed on this page. Rations for both beef and dairy cows are outlined. Your county agent or local vocational-agriculture teacher can help you work out more feeding combinations using whatever low-quality roughage you have on hand.

In addition to the directions given for the six roughages listed, here are other points to remember in stretching your feed supply.

Beef cows: The key to profitable management of beef cows is to fill them with low-cost roughage feed and supplement it properly. Cows may lose weight but if they [*Turn to page 92*

HAY For beef cow, feed 20 pounds good legume hay. If hay is grass, feed 16 pounds mixed with 4 pounds legume hay.

Feed 1,000-pound dairy cow 15 pounds legume hay plus 5 pounds corn, 2 pounds oats, 1½ pounds bran, ½ pound linseed meal. With 15 pounds grass, double oil meal.

CORN FODDER For a beef cow, supply 14 pounds corn or sorghum fodder plus 6 pounds of good legume hay. For 1,000-pound dairy cow feed 10 pounds fodder, 25 pounds corn silage, 3 pounds corn, 2 pounds oats, 2 pounds bran, 1 pound meal

SOYBEAN STRAW For beef cows, furnish 12 pounds of soybean straw, 5 pounds of good legume hay, and 3 pounds of corn-and-cob meal.

For 1,000-pound dairy cow, feed 15 pounds of soybean straw plus 12 pounds of grain mixture. Grain mixture should include 5 pounds corn, 3 pounds oats, 2 pounds wheat bran, 2 pounds soybean oil meal.

STRAW For beef cows, feed 15 pounds of oats straw plus 5 pounds legume hay or 14 pounds wheat straw plus 7 pounds of fairly good legume hay.

For a dairy cow, feed either 15 pounds wheat or oats straw plus 4 pounds corn, 3 pounds oats, 2 pounds bran, 2 pounds meal.

CORNCOBS For a beef cow, 14 pounds ground cobs, 2 pounds of cottonseed meal, 2 pounds molasses, 1 to 4 pounds corn or oats, 30,000 units vitamin A. For dairy cow, 15 pounds ground cobs, plus 11 pounds grain mix used with straw, above

GRASS SILAGE For a beef cow, feed 20 to 30 pounds legume silage plus 10 to 15 pounds good grass hay.

For a 1,000-pound dairy cow, feed 55 pounds silage plus 2½ pounds corn, 1 pound oats, ¾ pound bran, and 2 pounds oil meal. Or, feed 10 pounds hay, 30 pounds silage, 2½ pounds corn, 1¼ pounds oats, 1 pound bran, 1 pound oil meal.

A check list of ways to speed up pasture by 2 to 4 weeks

pasture—quick!

These are things you can do *now* to help get stock on pasture sooner. Check them over—at least one fits your farm.

If you have winter wheat or other fall-seeded grain: These are the *earliest* of all pastures. You can turn cattle on winter grain when it's 4 inches tall. In Missouri, southern Indiana, and southern Illinois, this may be as early as March 15.

You can leave the cattle on until around the middle of April and still not lose too much grain yield.

Tests at Pennsylvania State College show some loss of grain but the forage plus grain made more total nutrients than grain alone.

Kansas farmers graze in spring till wheat is almost jointing—and don't figure they're losing much yield. Grains to be grazed or clipped yield better—both pasture and grain—if fertilized early with 40 to 80 pounds of actual nitrogen per acre.

If you're interested in renting from a neighbor, Kansas farmers are getting from $2.50 to $4 per head per month for cattle on wheat pasture.

If you have permanent bluegrass: Nitrogen can bring bluegrass along two weeks faster. That's important this spring because grass is weak after the drouth and close grazing last fall.

Not only do you speed up bluegrass with nitrogen, you also increase the total spring-grass production. This was done at Dixon Springs, Illinois, in 1953 with amazing results.

Thirty acres of grass were top-dressed with 200 pounds of ammonium nitrate (67 pounds of nitrogen) last spring. This 30 acres carried 72 yearling heifers 71 days (April 13 to June 23), and produced 6,640 pounds of beef, or 220 pounds per acre—then the drouth hit again.

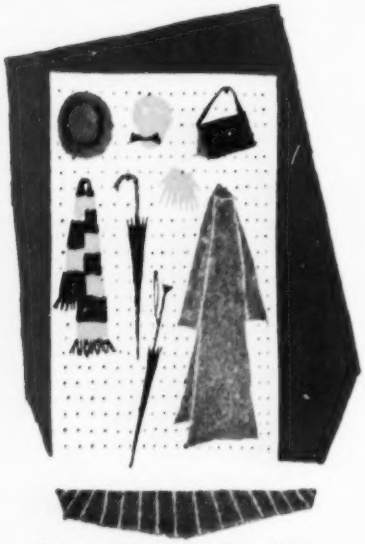
When figuring how much to nitrate, allow ½ acre of grass for each cow.

If you have an old stand of grass: An old stand of grass with the legumes gone can be sparked the same as the bluegrass pasture. Spread 40 to 60 pounds of actual nitrogen as soon as you can get on the ground after it thaws.

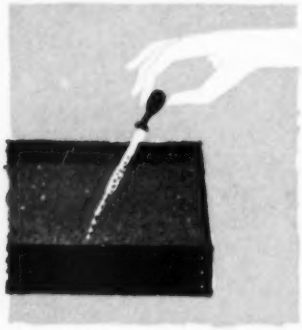
Bromegrass, orchard grass, and timothy all respond well to nitrogen. Fescue is especially noted for its fast start.

If you have to start from scratch: Oats really get up and go in early spring, and furnish excellent pasture. Ryegrass can be sown with oats, and will also get going rapidly. Oats won't furnish pasture [*Turn to page 94*

17 spring-



Put up perforated hardboard in the hall closet. Special hooks go in holes in the board, can be placed anywhere so all items hang neatly



Tiny seeds can be planted evenly with a medicine dropper. Remove rubber bulb to put seeds in tube

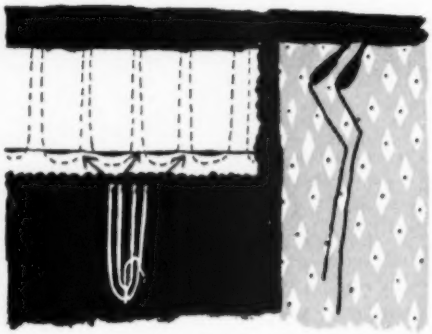
An upside-down window shade behind the range pulls up and hooks, keeps wall clean as you fry the supper

Washing the walls? Poor you! Be sure to start at *bottom*, wash *up* —if water drips on cleaned area, it won't leave stubborn streaks

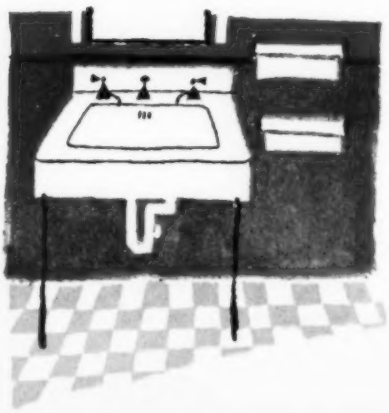
Like to eliminate scraping paint from windows? Before painting, wet the panes with water, smooth on pieces of newspaper cut to size

No need to paint yourself out of the upstairs. Just paint every other step; after they have dried, paint the alternate ones

Use a little bar of ironing wax in the starch so curtains will iron smooth and crisp; smell fragrant.



Foolproof way for pleating draperies: Use new muslin tape with stitched-in slots, pronged hooks to just slip in. It's magic!



Mud pies make little hands—*and* Mother's towels—grimy. Low dispenser with separate paper towels to pull out saves laundry

Your garden can boast perfectly spaced rows — painted stripes on your hoe handle do the measuring

Mothproof sweaters and small woolens by storing in tight lard cans, leaving in your freezer for at least 48 hours

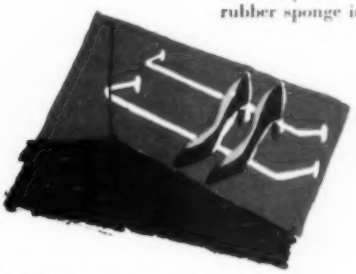
Dig fingernails in soap before working in dirt... nails will be easy to wash clean!

timely ideas

Here are some good, farm-wifely tips aimed to help you put more hours into these busy spring days of perking up the house' and putting in the new garden

Sure cure for "housemaid's knee": Sew a pocket in each knee of your old jeans or slacks, and slip a square of rubber sponge in each pocket to ease the kneeling job

Outwit that drying breeze! A plastic bag on the ironing board keeps even sheer curtains damp. Use a card table to keep them off floor



Off the floor with clutter! Put a pair of curtain rods — one shallow, one deep — on the wall about 4 inches apart. Low cost! Good!

In washing windows use up and down strokes on the outside, side to side strokes on the inside. You can easily locate the streaks!

Save your time and good disposition when time comes to rehang curtains — a thimble on the end of rod makes it glide through the curtain

lorraine fox

We'll try to write the bill farmers want . . .

". . . there isn't much use of having a farm program if you don't have the support of farmers."

. . . says Clifford R. Hope, Chairman of the House Agriculture Committee, in this exclusive interview with the editors of Successful Farming magazine

". . . committee became convinced that the program must vary to fit the different products."

Photographs: Swegle

"Parity is not too accurate. That is an area in which we should make further studies."

Q. *Since your committee's findings on its "grass-roots" tour last fall and this winter affects farm legislation now being written, would you summarize those hearings?*

A. We went from coast to coast—into every agricultural section of the United States. We completed the hearings with a trip to the Southwest in mid-January.

We had two objectives. The primary purpose, of course, was to learn from farmers themselves—near their own farms, what their ideas were of the farm program. We felt that there isn't much use of having a farm program—all of which must depend upon the cooperation of farmers to succeed—if you don't have the support of farmers. Even if the program has some compulsory features, *farmers still are going to have to make it work.*

I would say the No. 2 purpose was to enable the 30 members of our committee to familiarize themselves with agriculture in all parts of the country.

Q. *How many folks talked to you?*

A. I would say at least 2,000 persons testified at our formal hearings. In addition, we had a full house everywhere we were. And when we were traveling by bus we stopped frequently to talk with farmers.

Q. *What action will your committee take as a result of the hearings?*

A. Members of the committee became convinced that the program must vary to fit the different commodities. After we finish hearing testimony of the farm organizations, the secretary of agriculture, general organizations, and other groups concerned, then we will try to write a bill farmers want—what looks best to the committee.

Q. *What did farmers ask for—what things stand out in your mind?*

A. Well, I suppose that 80 or 85 percent of the testimony was concerned with price-support levels. I would say that probably not 1 percent who appeared were opposed to *all* price supports.

Q. *Did you find most farmers for flexible OR for what we have come to call "high fixed" price supports?*

A. In the South we found farmers very well satisfied with the present program, with support on basics at 90 percent of parity, exactly as it is. And the majority of farmers in the other areas expressed themselves as satisfied with the present program—with such improvements in administration as time and experience might dictate.

Q. *Did you find much desire for flexibility in price supports?*

A. Yes, we found some—but generally speaking, it was a minority view. About the only exception was in specialized crop areas.

However, I don't believe that farmers should have to choose between such wide variations in programs, as they had to in the wheat vote. There the only choices were 90-percent supports and acreage restrictions OR 50-percent supports and no restrictions. Perhaps they should also get a chance to vote for a two-price plan.

Q. *Do you think "high" price supports are the cause of "surpluses"?*

A. Under any sort of farm program—flexible or inflexible—we are still going to end up with some surpluses or reserves.

Q. *Are our farm programs fair to consumers?*

A. The fact is *all* farm programs have taken into account the interests of the *rest of the population* by stabiliz-

ing supplies and prices. There has never been a time when a day's labor would buy as much of farm and food products as today.

Q. ***Do "high" supports make for rigidity in farm production?***

A. If you have high prices you have to raise less, if you have a low price you have to raise more, for the same gross income. One way or another you get your adjustment. During the time we have had our price-support program, we have had great changes.

Q. ***Is there a possibility it might even have helped in some instances?***

A. Yes, otherwise sometimes farmers are bogged down by not being able to afford to change. I think in the South, farm programs had a direct connection with the change and have accelerated it.

Q. ***Do we mine the soil of fertility at high prices?***

A. No, I don't think so. You can take better care of your land by buying more fertilizer, and by building up the soil through conservation and watershed programs.

Q. ***What is the effect on exports?***

A. In some cases price supports require more in the way of export subsidies and controls. I don't think we have lost any opportunity to export wheat.

Q. ***Do fairly high price supports hurt the efficient producer?***

A. No, as long as he has a choice. It would cause more efficiency probably on the main crop—and as long as he has other crops to which to turn, he is all right.

Q. ***Should we change support levels because of better technology?***

A. That is one of the things that concerns me. Support prices are worked out on the basis of what we call parity. Parity is not too accurate. That is an area in which we should make some further studies.

Q. ***On the basis of all this, what do you see ahead in the next few years?***

A. I can't see anything but good ahead as far as agriculture is concerned, particularly in view of increasing population here and abroad. In addition, people are shifting from starch to protein foods, like meat, milk, and poultry—which means more food production *per* consumer. **END**

A *Successful Farming* report on agricultural policy

Here's what we want . . .

. . . say Successful Farming readers, in response to an invitation for letters. This roundup contains some fresh, new approaches to today's farm problems

In the December issue of *Successful Farming* we reported the thinking of farmers throughout the nation on what they'd do if they were in Secretary of Agriculture Ezra Taft Benson's place. At the same time, we invited readers to write us their views on farm programs. No sooner had the issue gone to the rural routes till we were flooded with letters.

A lot of thought went into most of the letters. In some cases, groups of readers got together and discussed the farm program before writing. Here are excerpts from some typical letters. You can check and see how well you agree with these readers.

Carl D. Summers, Jacksonville, Illinois: I'd ask Congress for a law to require all farmers to keep a sufficient percentage of tilled acres in grasses or legumes to eliminate overproduction of all surplus crops. This law should be *mandatory—with no subsidy for complying.* Inside of this requirement, farmers would be allowed to plant as they wished.

Guy E. Hillier, Cedar Rapids, Iowa: I would buy butter from creameries at the support price and sell it back immediately for packaging and retail sale at a price the consumer will pay. That way the government would write off its loss every month and not pile up huge stocks.

And I would raise the minimum fat content in whole milk for retail from 3½ percent to 4 percent. I believe that increase would eliminate our butter surplus.

Dale McWhirter, Stockton, Missouri: I'd improve public relations by dropping the word "surplus" and using "reserve." Tell the people just how much wheat, corn, and so on, we have per capita, and how long it would last in an emergency. I'd quote the cost of this reserve by the "*losses*" instead of the *investment*—and let the taxpayer know just how little he pays for the assurance of enough food.

Allen L. Boettcher, Unadilla, Nebraska: The support level should be determined as follows: Annually, before the planting season, the secretary of agriculture shall announce the tentative support price for that crop year, presuming a normal crop year is ahead. The final support price will be set at harvest time—with an adjustment made according to the size of the crop, compared to normal.

For example, suppose corn was set at 80 percent of parity. With a normal crop, the support would remain at 80 percent. If the crop was 25 percent above normal, the support would be reduced 25 percent—to 60 percent of parity. With a crop 25 percent below normal, the support would be raised 25 percent to 105 percent of parity.

Mildred McNamara, Richland, Michigan, acting as secretary for a group of 18 farmers and farm wives who discussed farm programs together: We propose a new system for establishing prices on farm commodities. There needs to be: (1) A price-determining department to figure 100 percent of parity on all farm products. Prices should be fixed at those figures in advance; (2) a production-planning department which would determine needs and supplies on hand to set up production goals. These goals would be allocated to each state on the basis of history of production for the past 10 years—and to farmers by a farmer-elected group. And (3) we need a cooperative marketing department.

Junior Hursel Miller, Barden, Ohio: We have [*Turn to page 140*

8 newest ways to raise corn

New ways to save time, gas, and machinery wear. Ways to prevent erosion, speed water intake, improve tilth. Ways to increase fertility, and shorten rotations. *At the same time*, have more corn per acre—oftener. Reports on best methods to date

By George D. Johnson

1. "Mulch" planter in sod—*time, soil saved*

Keep an eye on the "mulch-type" planter which prepares the seedbed, fertilizes, then plants, in one operation.

Above is William Peterson, Crawford County, Wisconsin, who had a mulch-planted strip (left foreground) which yielded 136 bushels. At right is regular plowed and planted, approximately the same fertilizer treatment—which yielded 146. Slope was 10 percent.

Why lose 10 bushels? Art Peterson and Ed Engelbert, University of Wisconsin soils men, think water saved, erosion controlled, time and expense saved at planting, and soil improvement both in fertility and tilth will more than make up the difference.

2. Wheel-track planting—*why overwork the soil?*

Now—a method which actually reduces the out-of-pocket costs of growing corn. All working between plowing and planting is eliminated. Also, fewer cultivations, less erosion, better weed control, improved soil tilth make this an important new corn-raising development.

Shown is Steve Dickerson, Van Buren County, Michigan, who plowed this piece two days before.

He uses a tractor with wheels that narrow to planter width. You can rig the planter behind a regular tractor so that one shoe travels in a rear-wheel mark, the other shoe in the front-wheel track.

See next month's *Successful Farming* for more information.

Turn to page 120 for No. 7 and No. 8 of "newest ways to raise corn"

3. Wide rows, seeded to legumes—*skip oats*

This idea appeals to the farmer who's been losing money on oats—it shortens his rotation by giving him corn followed the next year by meadow. Also, some farmers want a cover crop over winter in corn. A few are trying it with the idea of raising corn on the same ground, year after year with a green-manure crop every spring.

Forrest Wright, tenant of O. E. Ackerson, Boone County, Indiana, holds alfalfa plants as they looked last October in his corn. He planted corn in 60-inch rows, using the inside boxes of two 2-row planters. He band-seeded when the corn was about knee high, using a drill with two planting units removed over each corn row.

4. Corn every year—*highest income per acre*

Not too attractive in a year of acreage allotments is the system of Yontz Bonnett, McLean County, Illinois, but the time may come when we'll need this method. Bonnett has hauled in 47,677 bushels of corn off 67 acres in just six years. His average last year, 123 bushels.

Fall is key time in his system. He shreds stalks, spreads over 1,000 pounds of fertilizer on this mulch. He then fall-plows. The idea is to decompose the stalks quickly in spring, leaving plenty of plant food available. He hill-drops 2 kernels every 19.7 inches, using 200 pounds of starter.

He's shown above indicating depth he was side-dressing corn in the middle of June, 1953.

Photographs: Pease; Hufnagle; Monkmeyer; Chapman

5. Continuous, "mulch" planted—*1-4 combined*

Dr. George Scarseth, Tippecanoe County, Indiana, is beginning his fourth year of continuous corn using the "mulch" planter. (Same as described in 1.) Above, you can see his seed-bed—stalks are left on the surface. Scarseth says this about the method: (1) "Saves labor"—2 to 3 tractor man hours per acre versus 10 for the regular methods save $28. This almost covers his $34-per-acre fertilizer investment. (2) "Erosion is held to a minimum." Surface mulch and deep slice in soil help funnel water down. (3) "Yields are good while soil is improving." Yields aren't as heavy the first year or two (88 bushels, 3-year average) but he believes he can grow continuous corn.

6. Strip planting in sod—*corn in clover*

A strip of corn—a strip of sod is F. J. (Jean) Charavay's idea for rebuilding 100 acres of rolling western Ohio land. He is relying on heavy fertilization, deep tillage, and legumes to protect and improve the soil while growing corn in strips on it. Above, he points out the 20 inches between rows and unworked sod.

Instead of moldboard plowing he works up 80-inch strips of ground 12 inches deep with a multiple chisel plow. He leaves a strip of sod between. The plowed strip he then works with a spring-tooth packer—also 80 inches wide. Charavay plants two normal-width corn rows in each strip. He'll rotate clover, and corn or soybeans.

Pull up a chair–

It's time for supper

What's that wonderful smell coming from the kitchen? Supper, of course, and it's good! Pull up your chair and dig in. The food is hot and hearty – plenty for second and third helpings. No fancy dishes here, just old-fashioned country cooking guaranteed to please your hungry men. We think you'll rate these supper dishes "tops" because they're so easy to fix and they're practically complete meals in themselves. That's not all, they give the budget a real break. We think you'll especially enjoy these dishes during March when all too often mealtime gets a bit routine. You'll find them stand-bys all through spring, too. (*You'll find recipes for these supper dishes on page 110*)

By Elizabeth Page

Color photograph: Snook, Photography, Inc.

The living room in the Glen Fultz farm home not only rates a perfect score on arrangement, but on color as well. Plenty of light accents are in contrast to dark-green walls, and bright colors have been used sparingly

Photograph: Hedrich-Blessing. Drawings: Richardson

Let's apply these rules to this room

1. Furniture has been grouped with purpose in mind: a place for cards, writing, conversation, and reading.

2. Passageways have been left open between living room and den, into dining room and in front of sofa.

3. Fireplace has been made center of interest in room. Mirror, mantel arrangement, furniture play it up.

4. Large pieces such as sofa, chairs, tables are parallel to walls. The curved desk is set cater-cornered.

5. Large and small pieces of furniture are distributed evenly in room, as has been the color scheme.

6. Bookshelves (not shown), adequate tables for lamps by chairs and sofa provide place for everything.

Designed for living-dining and follows the rules

1. Successfully arranged for living, dining, and writing.
2. Traffic lanes into other rooms are kept open with this efficient room arrangement.
3. Center of interest is fireplace wall, played up by bookshelves, furniture, pictures.
4. Large pieces have all been placed parallel to the walls.
5. Large furniture is grouped with small pieces, and color and pattern evenly distributed.
6. A place for books, linen and china chests, tables for lamps and accessories complete room.

Good furniture arrangement

—*key to a well-planned room*

By Betty Fisk

One of the secrets of a comfortable and livable room lies in the convenient arrangement of the furniture. No matter how many dollars you've spent on the furnishings, it can be a complete failure if it means hurdling an obstacle course of badly placed furniture the minute you enter the room. Or, completely shifting chairs and sofa before sitting down for a family evening of conversation or television.

Because of its good arrangement, we used the living room in the Glen Fultz farm home near Rantoul, Illinois, as an example. Theirs is rather typical in size and shape, and Mrs. Fultz did a wonderful job of arranging it to suit their way of living. To show you how versatile the same size-and-shape room can be, we give two other arrangements using different furniture, windows, and fireplace. So here are three versions to choose from —try some of the ideas in *your* home.

Here are 6 rules to follow when arranging furniture

1. Arrange for a definite purpose. Group your furniture for music, reading, conversation, writing, or television

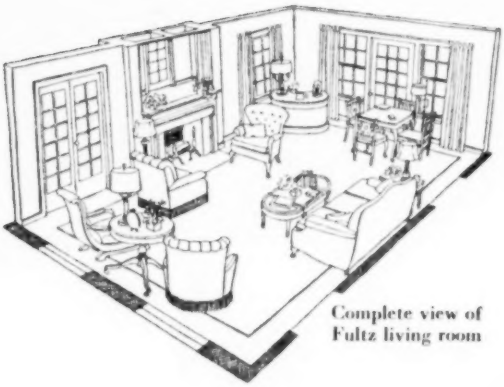
2. Keep traffic lanes open. Passageways should be left clear so that in going through a room you will not have to walk around all the furniture

3. Choose a center of interest—such as a fireplace, picture or bay window, a sofa grouping—then play it up

4. Place large pieces parallel to the lines of the room. Avoid cater-cornered placings except for small pieces

5. Distribute color and size of furnishings. For instance, don't put all the heavy furniture, or all furniture of one color, on the same side of the room

6. A place for everything. Have you provided adequate bookshelves, tables by the sofas and chairs for lamps, a spot for all your necessary accessories?



Complete view of Fultz living room

A modern version well arranged

1. A room well divided—for living, that is! It's been arranged for television, reading, writing, and just sitting by fire!
2. No bumping of shins on furniture in the way here. Paths are open for going from room to room.
3. Large window and built-ins become center of interest in this room. Corner furniture arrangement helps to play it up.
4. Large pieces are parallel to the walls as they should be. Corner TV makes for easy viewing.
5. Large and small pieces of furniture have been evenly distributed. Pattern in curtain and furniture are well balanced.
6. Definitely a place for everything with cabinets and shelves, tables for accessories and lamps.

Work out your own arrangement on paper! See *Successful Farming's* Furniture Arrangement Kit on page 169

Here's how Norman Nellen made a cost-cutting deal with his cows:

He swaps grass for half the

Pasture and grass silage are the heart of the system

Rationed rotation grazing is one of the big reasons Nellen gives for reduced grain feeding. Three-acre pasture plots are divided into narrow strips with electric fence. The cows graze one strip for 12 hours, then they are moved on to the next 3-acre plot

Pasture mixture used most is alfalfa-brome, but on some acres, Ladino clover is used also. Ladino is not recommended for Nellen's area but he says it keeps coming back each year. Rye is used for pasture during early spring and late fall seasons

Long-grass silage, put up in a trench silo, makes up most of the winter ration for the cows. The forage cut for silage is bucked directly from the swath into the hillside trench silo. When full, the silo is carefully covered with bluegrass clippings

By Harold Severson

Better than 11,000 pounds of milk and 400 pounds of butterfat per cow per year. That's what Norman Nellen, Bongards, Minnesota, gets from his 35-cow herd. This record isn't a world-beater, but it is exceptional because *this dairyman feeds only 1 pound of grain for each 9 pounds of milk.*

Nellen achieved this low-cost milk production by following a three-point plan:

1. Using a *rationed* rotation grazing system.

2. Providing a variety of forage—alfalfa, brome, sudan, rye, oats, and Ladino clover.

3. Feeding long-grass silage during the winter.

Nellen's present program started 6 years ago when he bought a 146-acre farm in Carver County, Minnesota. This young farmer decided to concentrate on dairying, and spend very little time or effort on grain crops.

The pasture program on this farm is fairly new in this country. Nellen's program got its start when he heard a talk on New Zealand dairying. Dairymen in that country rarely feed much grain.

Nellen decided to adopt some of the New Zealanders' methods—particularly "rationed" or "break" grazing—to his own operations. Here are some of the operating changes he's made to follow this pasture plan:

1. Grain. Instead of feeding 1 pound of grain for each 3 to 5 pounds of milk, he feeds 1 pound for each 9 pounds of milk—and hopes to reduce the amount still further. Quality and quantity of forage make this low grain ration possible.

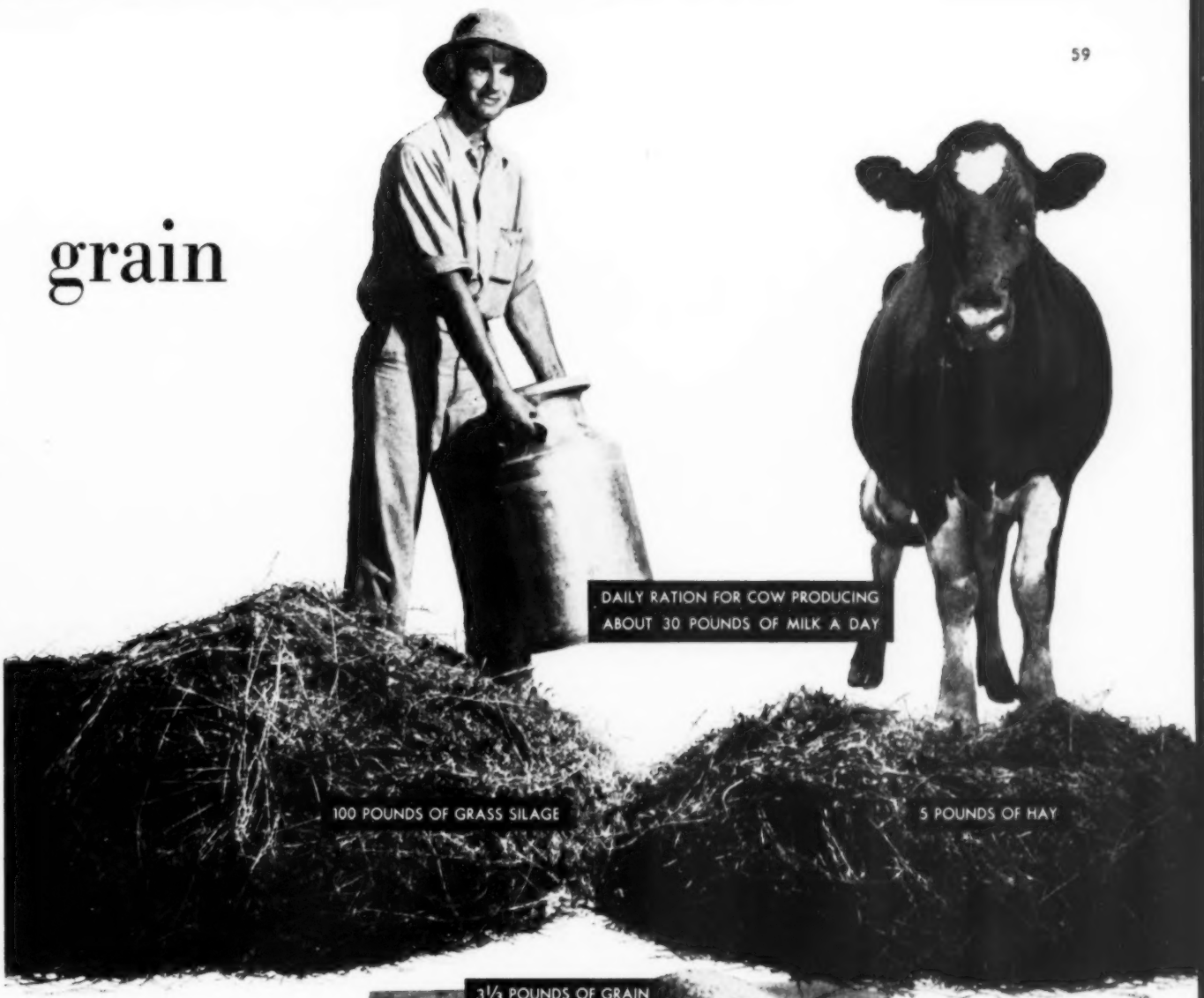
2. Pasture. One hundred and thirty acres are seeded down. Pastures are divided into 3-acre plots by using both electric and permanent fences. Nellen plowed between the trees in an 8-acre woodlot, and seeded the area to a pasture mixture. Soybeans are planted for silage on a small amount of peat ground. A variable forage program is used, starting with rye in early spring and continuing through summer on alfalfa-brome, straight alfalfa, Ladino-alfalfa-brome, Sudan grass, and oats.

3. Silage. A trench silo is used and is filled with long-grass silage. The long forage is bucked directly from the swath into the trench silo.

4. Rotation grazing. The 3-acre pasture plots are divided into narrow strips with electric fence and the cows graze 12 hours in each strip.

Three-fourths of Nellen's pasture acreage is in an alfalfa-brome mixture. But he does have some with Ladino clover and others of straight alfalfa. [*Turn to page 128*

grain



Low-grain ration takes time to put into effect. Shift to a high-roughage ration must be gradual, especially if cows have been on a heavy grain ration, Nellen says. His future plans call for less grain

Here's the payoff: High production from good, low-cost roughage

Herd average is better than 11,000 pounds of milk and 415 pounds of butterfat per year. "My system calls for top-quality forage feeding every month of the year. Rationed grazing and long-grass silage cut the grain in half," said Nellen

Photographs: Reynolds, Photography, Inc.

Successful Farming's report on

Green-lot feeding

By Oscar Ackerson

"Green-lot feeding"—or hauling green chopped forage *to cattle* instead of letting the cattle graze—gave proof last summer that it's out of the growing-pains stage. Chopping and hauling green forage has eliminated a lot of problems—and produced *extra* money—for many cattle feeders and dairymen.

This article is a roundup of information gathered from farmers using the green-lot feeding system. Seven advantages claimed by most farmers for green-lot feeding are listed in the upper right corner of this page.

Farmers are using two systems of feeding green chopped forage. Some farmers feed the chopped forage in regular bunks. Others use a feeder mounted on wheels like the one shown at the bottom of this page. This wagon-feeder is filled direct from the chopper, then pulled into the feedlot.

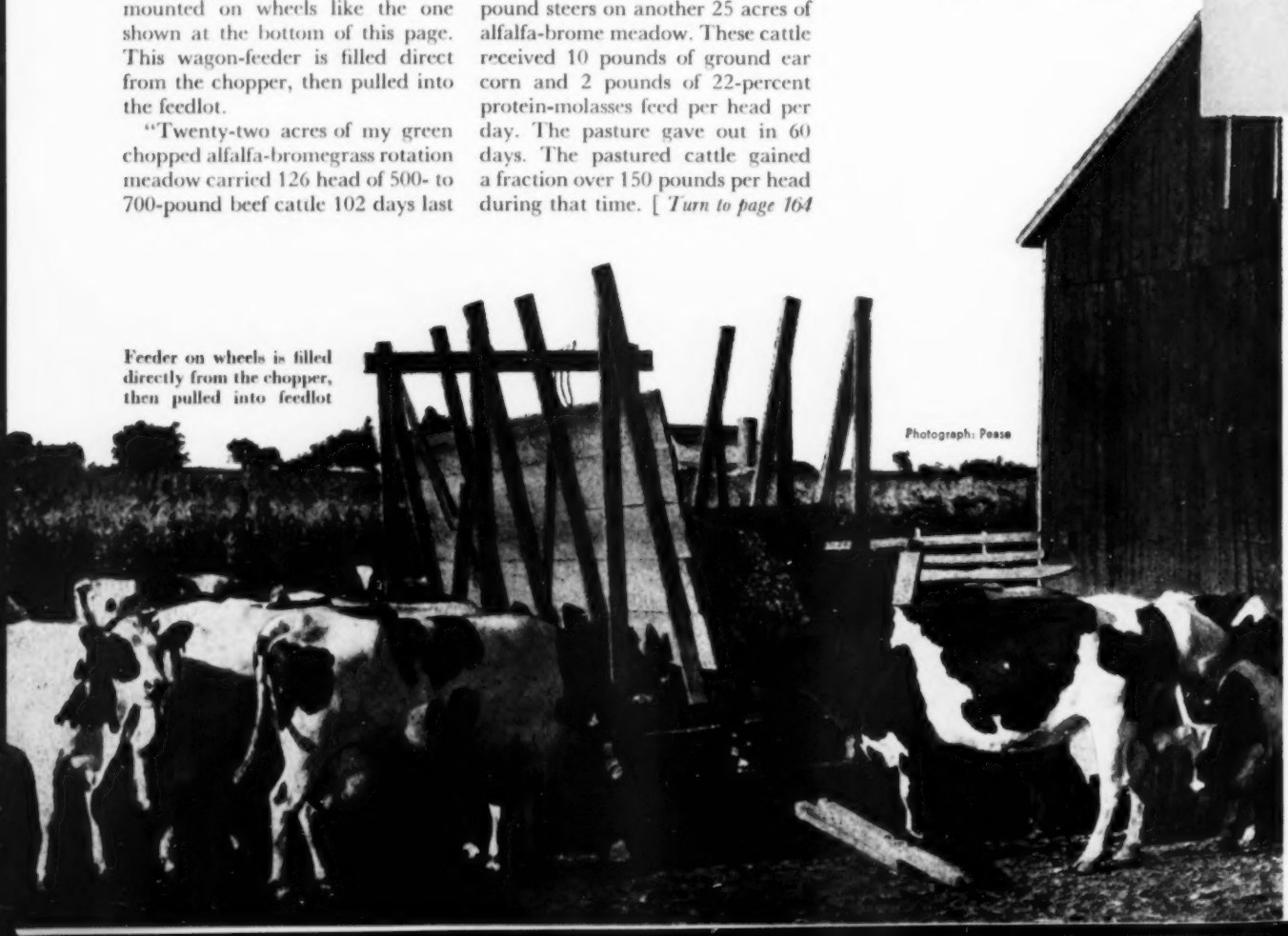
"Twenty-two acres of my green chopped alfalfa-bromegrass rotation meadow carried 126 head of 500- to 700-pound beef cattle 102 days last summer," said Bernard Kozik, manager of the Valley Hereford Farm in Johnson County, Iowa. "The cattle also received 5 pounds of ground ear corn and 1 pound of 11-percent protein molasses per head per day. This was in addition to all the green chopped forage they would eat," Kozik said.

"Each animal made an average gain of approximately 210 pounds during the 102 days. I give credit for ⅓ of the gain to the corn and molasses and ⅔ to the green chopped legume-grass forage. According to my figures, each acre of meadow *produced 802 pounds of beef*," Bernard said.

"We also *pastured* 73 head of 850-pound steers on another 25 acres of alfalfa-brome meadow. These cattle received 10 pounds of ground ear corn and 2 pounds of 22-percent protein-molasses feed per head per day. The pasture gave out in 60 days. The pastured cattle gained a fraction over 150 pounds per head during that time. [*Turn to page 164*

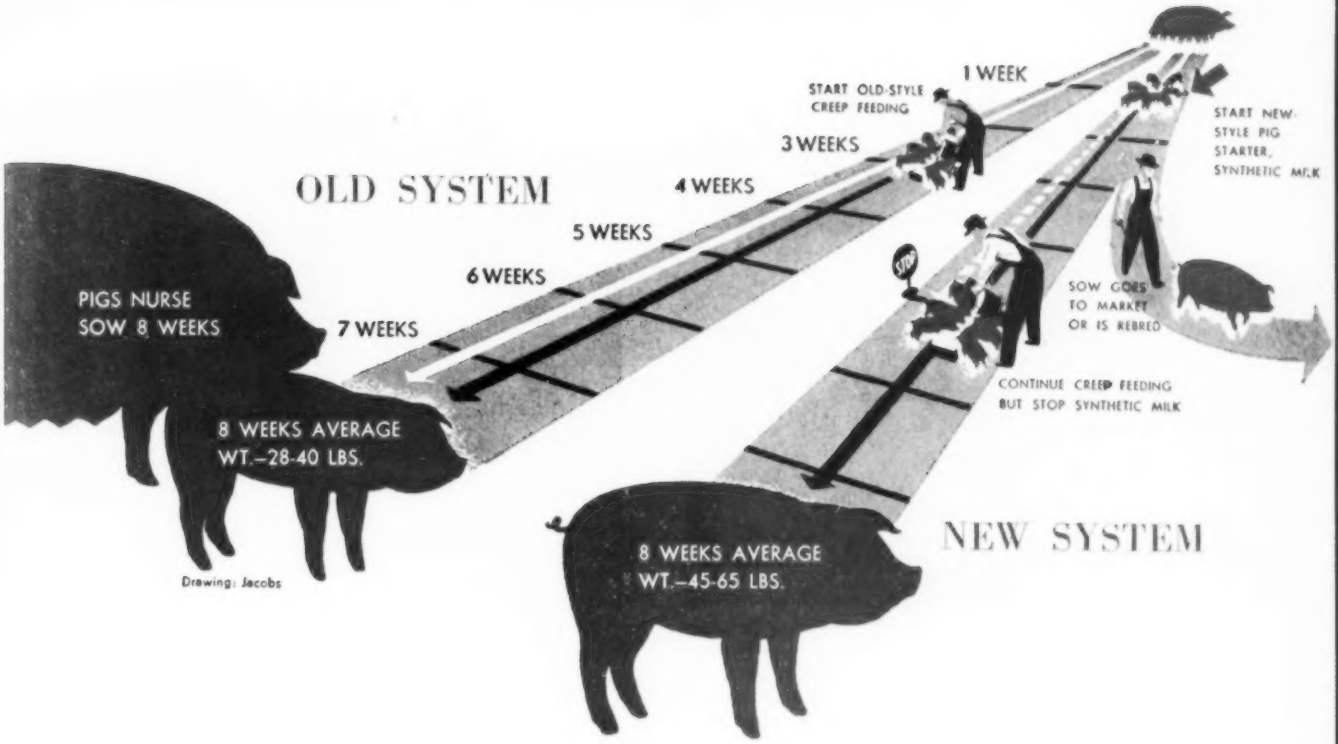
Farm-tested advantages of green-lot feeding idea

- You'll get more feed from each acre—twice as much or more, say farmers who are green-lot feeding
- You can use unfenced, distant pasture. The cattle are never let out of the lot during the summer
- Farmers following green-lot system say the danger of bloat is much less when the cattle aren't grazing
- In dry weather, you'll get more and better feed with the green-lot system than you will from pasture
- Beef cattle gain faster from the green-lot system. Dairy cows produce more milk than when grazing
- You won't need to supply water in the outlying pastures. Sheds or barn are used for summer shade
- There's still some disagreement among farmers as to whether the green-lot system saves them labor. Some say yes, others say there's about as much work with green-lot feeding as there is with grazing



Feeder on wheels is filled directly from the chopper, then pulled into feedlot

Photograph: Pease



Have you been leaving

Pigs on sows too long?

Here are some of the advantages of using this new program for raising pigs

- **You'll save sow feed. Sow needs 6 pounds feed per day during gestation, 12 pounds during lactation**
- **Sow's milk flow goes down rapidly after first 3 weeks of nursing. Pigs sometimes "tug for nothing"**
- **Better pig starters used today save you money in the long run because the pigs gain so much faster**
- **Weaning pigs earlier reduces the hoghouse-cleaning chores. Also, less housing is needed for the pigs**
- **Getting pigs off the sow earlier reduces the amount of weight lost by the sow during lactation period**
- **Sow can be rebred sooner if pigs are weaned earlier. Or, sow can be marketed in better condition**
- **Biggest advantage is probably the fact that the pigs weigh a good deal more at the end of 8 weeks**

Weaning pigs at an earlier age is probably the newest pig-raising development afoot these days. Some of the advantages of this system are outlined briefly on the left side of this page.

With the use of antibiotics, new creep feeds, and substitute sow's milk, pigs are being taken away from the sows as early as 2 days of age, or after they have received colostrum milk. Some pigs are left with the sow a week, others 2 weeks, 3 weeks, and so on.

From results so far, it appears that the hoped-for success of substitute sow's milk may now be at hand. But the trick that makes substitute sow's milk really work is the *dry feed* you give the pigs along with the milk. Even if you don't want to use a substitute milk, feed a *good* creep feed. Use the best feed you can get, even if it costs a bit more than a poorer ration.

The drawing above shows a system followed by Dr. Damon Catron at Iowa State College in his pig-feeding work. Look this system over carefully. You may be able to use it, or one similar, on *your* farm. The results shown in the drawing above were obtained from large numbers of pigs, so the system is a good one.

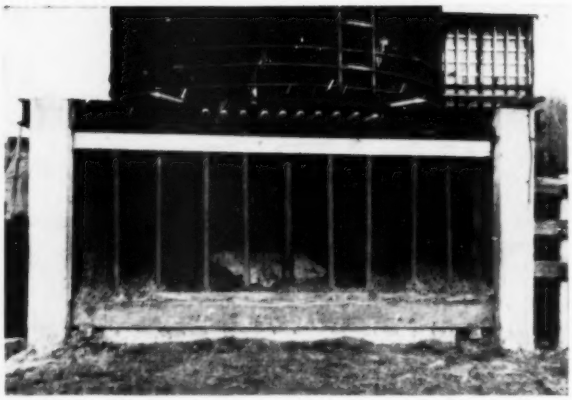
The one single factor in this new idea of weaning pigs earlier is the feed you put before the pigs when the pigs are a week old, regardless of whether or not you leave the pigs with the sow for 1 week or 3. To get the best results, little pigs should have a chance at choice, appetizing creep feeds or starters as soon as they will eat. Pigs will begin to nibble dry feed at 7 days of age.

Here is a pig starter used by Doctor Catron with good results:

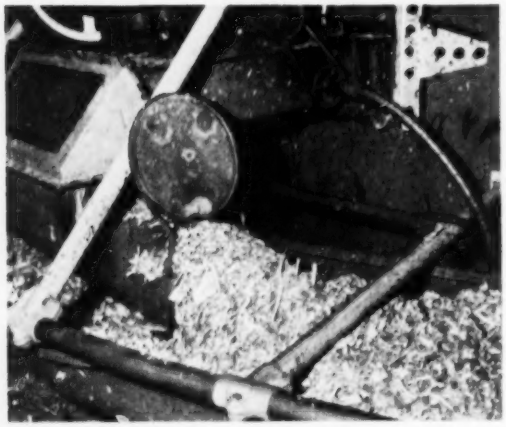
	Pounds
Table sugar	300
Yellow corn (ground coarse)	350
Rolled oats	800
60 percent fish meal	50
Dried whey	50
Soybean oil meal	400
Ground limestone	20
Steamed bonemeal	30
Salt	10
Trace mineral mix	4

To this ration, add a vitamin-antibiotic pre- [*Turn to page 174*

Self-feeding trench silo, used by McWilliams Brothers, Morrow County, Ohio, is 3 feet in ground with earth-ridge sides, 5 feet above ground level. Posts in feeding fence rest in postholes to hold fence upright. Manure loader on tractor lifts fence, moves it forward every 3 weeks. Silage is thrown down daily.



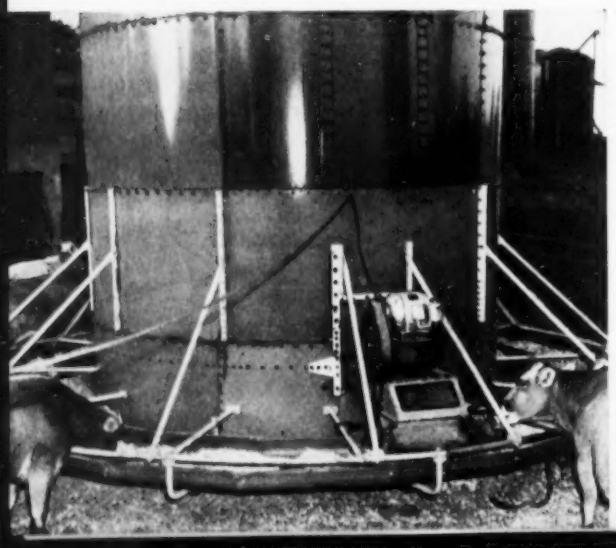
Self-feeding upright silo uses new principle. Steel pins, 2½"x 18", *hold up* silage or *retard* the downward flow. Pulling out pins controls silage. Experiments conducted by New Jersey Agricultural Experiment Station, New Brunswick, show that grass silage is *loosened* as it passes pins. There is no problem due to silage compaction on the pins. Pins tend to work out, are easy to remove.



Experimental circular feed bunk handles 35-40 cows with no hand feeding on A. O. Smith Research Farm, Beloit, Wisconsin. An automatic unloader brings silage out of the silo and feeds in into the bunk. One revolution of bunk, driven by a flexible shaft, and the bunk is filled.

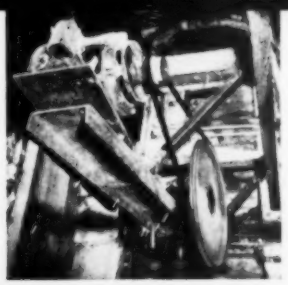
Handle silage automatically next year . . .

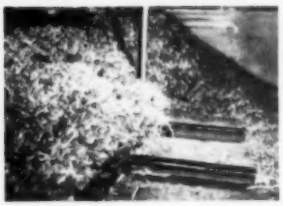
Don't break your back with a basket

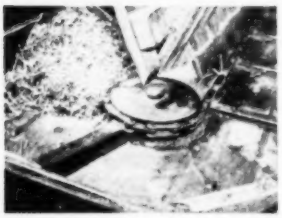


You can get ideas from these silage handlers. Some are inexpensive, some are costly. Even the most expensive idea may be best for you if you have enough animals or if you make efficient use of time saved

By S. S. DeForest

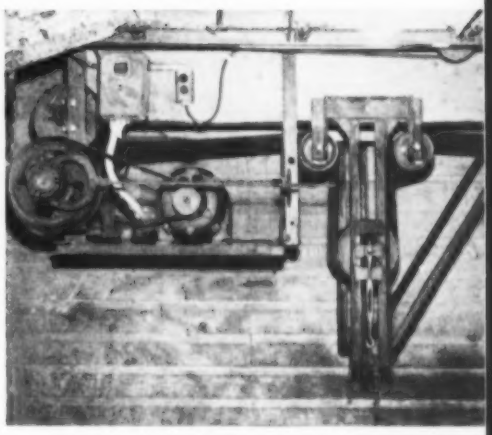






Combination bunk and hayrack is used on Yousey Brothers' farm, Erie County, New York. Commercial gutter cleaner is installed in 57′ long bunk. Complete operation of silage feeding takes total of 10 minutes. Then switch is shut off and enough silage is thrown down for next feeding.

A 1-hp motor drives the conveyer through long shaft at one end, idler sprocket at other end carries silage around corner. The hayrack holds 14 bales.



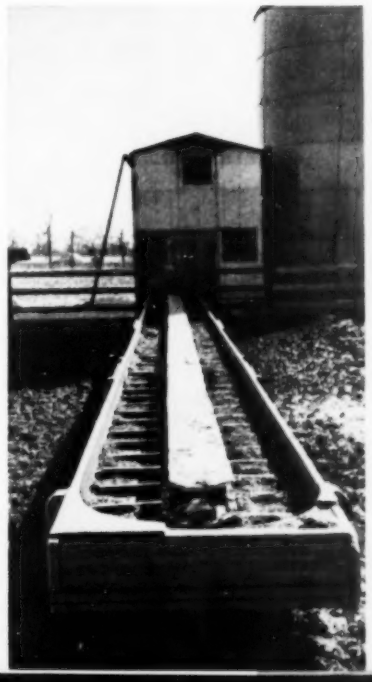
Conveyer designed by agricultural engineers, University of Minnesota, uses a 2-ply cotton, asphaltum-impregnated belt, 14″ wide, 230′ long, joined at ends. A "plow" rides on belt; pushes silage off into bunk.

The plow advances automatically across doorways, distributes silage uniformly. A 2-hp motor drives the unit.

Self-unloading wagon, made by E. J. Logan and sons, Morrow County, Ohio, is a converted manure spreader. As the wagon is pulled alongside bunks, silage is moved to either side by rear-mounted cross conveyer.

Filling the bunks for 55 cows requires 3 to 5 minutes. An elevator in the silo helps load the wagon.

Photographs: Pease, Royal, Joe Munroe, Singley, Pomroy



Mechanical feed bunk conveys silage, grain to steers on J. G. Scott farm, Du Page County, Illinois. A 1½-hp motor drives barn-gutter cleaner mounted in the bunk. Silage is unloaded from the bottom of silo.

Small building is used for shelter, feed storage. Grain bins are elevated. Small, portable elevator conveys grain and silage out of building to bunk, eliminating all handling of materials by hand.

How to welcome washday

Here are 6 farm-home utility rooms that can help a woman live with big washings and like it! They're sparked with light, color—and worksaving machines

By Maurine Harris

Heaps of grimy overalls, mountains of dingy towels *used* to be the cause of washday blues, backaches, and bean soup for dinner. But no more! Old washhouse ways waste as much energy as picking corn by hand.

The rooms you see here were planned by women who decided to *do* something about the drudgery of big farm washings. Half of them live in remodeled old houses—half in new ones. But they all have discovered that a well-equipped, first-floor laundry room makes a world of difference in the busy routine of farm living.

We agree with them—basement stairs are the bunk! With the laundry room just off the kitchen, you can wash and keep an eye on dinner at the same time.

What goes in the properly attired farm utility room? A washer, of course. Whether it is the wringer type or an automatic depends on your preference, and on how adequate the water supply is on your farm. Both kinds do a good job, if you have really *hot, soft* water.

If you have very hard water, a water-softening system should be one of your first considerations in relieving the strain of washday. A softener can save you hours of hard work and many dollars in soap bills.

A dryer and an automatic ironer belong in your utility room if you really want to welcome washday. These two do away with the lifting, stooping, standing, and bending that used to spell exhaustion every washday.

Your house may have just the spot for a sparkling utility room like one of these pictured here—an old back bedroom or an unused pantry. Or maybe you can add a small room to your house. It'll be one of the "worksavingest" spots on your farm. [*More on page 142*

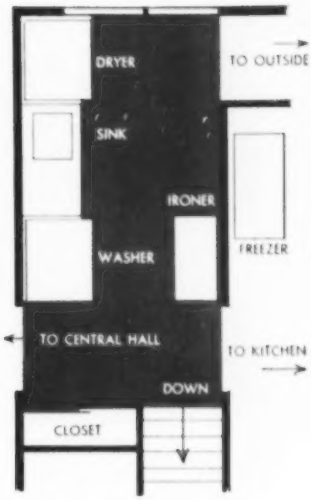
A laundry tub and kitchen sink back-to-back separate kitchen and laundry space in Washington County, Iowa farm home of the James Birneys.

Small but practical, it has space for washer, dryer, tubs, hamper, cabinets. Divider has planter on top.

In the new farm home of the C. D. Goyens, Pratt County, Kansas, the rear entry is through a utility room, saves the kitchen.

Ideal location for stall shower and the storage of work clothes and supplies.

Caldwells packed a narrow area with convenience — freezer, cabinet space, plus laundry equipment



Laundry room is one of the brightest spots in the new farmhouse of the Harvey Starkeys, Buffalo County, Nebraska. Painted walls, waxable floors are easy to keep.

Room is ideally located as a go-between for outdoor and basement traffic, and handy to all the house.

Typical old "back room" became this sunny alcove to lighten the job of washing for a family of five. It's in the Norman Frye farm home, Scott County, Iowa.

Mrs. Frye can see driveway, play yard as she irons. Cotton curtains, clay-tile walls show smart planning.

Photographs: Reynolds, Photography, Inc.; Hopkins; Suter, Hedrich-Blessing

Mrs. Ross Caldwell, Green County, Wisconsin, says, "Washdays never make me tired any more." Ironer, in handy spot, is used regularly. Dryer is vented to keep the room pleasant

The only suds with BLUE-MAGIC WHITENER!

...washes clothes so clean, so white

YOU DON'T NEED BLUING OR BLEACH

First and only washday detergent of its kind!

What's so new—*so wonderfully different* about blue CHEER? The secret, gals, is CHEER's amazing Blue-Magic whitener—an *exclusive* Blue-Magic whitener that whitens your whites, brightens your colors in the newest, most modern way.

Radiantly white washes without bluing or bleach! CHEER with its Blue-Magic whitener washes clothes so wonderfully white, you'll never need bluing again. What's more, except for stubborn stains, you don't even need to bleach. Yet, CHEER is so safe for colored washables.

See the proof in your washer!

CHEER's magic blue granules snap into action-packed white suds that wash your clothes so clean, so white you don't need bluing or bleach!

Great for both automatic and conventional washers

Guaranteed by Good Housekeeping

Procter & Gamble's

cheer

The one and only

BLUE-MAGIC SUDS

Change to CHEER for dishes, dairy utensils, too!

Glasses, dishes, dry "twinkle-clean"—without wiping. New CHEER helps prevent formation of milkstone on dairy utensils. And CHEER is so m-i-l-d on your hands!

©1954, The Procter & Gamble Company

Pecan Waffles

2 cups sifted flour
1 teaspoon soda
1 tablespoon sugar
¾ teaspoon salt
2 egg yolks
¼ cup cider vinegar
1¾ cups milk
⅓ cup melted shortening
¾ cup chopped pecans
2 egg whites, beaten stiff

Sift flour, soda, sugar, salt together. Combine egg yolks, vinegar, and milk. Add sifted dry ingredients, shortening, and pecans. Stir until smooth. Fold in stiff-beaten egg whites. Bake in a hot waffle baker for 3 to 4 minutes.

—*Mrs. D. J. Scott, Missouri*

Griddle Cakes

(Makes about 1½ dozen pancakes)

1 cup sifted flour
5 teaspoons baking powder
1¾ teaspoons salt
1 cup whole-wheat flour
1 cup yellow corn meal
2 cups milk
3 eggs, well beaten
⅓ cup melted shortening

Sift flour, baking powder, and salt together. Mix with whole-wheat flour and corn meal. Combine milk, eggs, and shortening. Add to dry ingredients; mix until smooth. Drop by spoonfuls onto hot ungreased griddle, turning once during baking until both sides are golden brown.

—*Mrs. J. P. Greenlaw, Missouri*

Whipped-cream Waffles

1 cup sifted flour
2 tablespoons sugar
1 teaspoon baking powder
¼ teaspoon salt
1 cup heavy cream, whipped
2 beaten egg yolks
¼ cup melted butter
2 egg whites, beaten stiff

Sift dry ingredients together. Whip cream, add egg yolks. Fold in flour mixture. Add butter. Fold in stiff-beaten egg whites. Bake in a hot waffle baker. Serve with preserves.

—*Mrs. E. M. Frentzel, Ohio*

So good with cheese

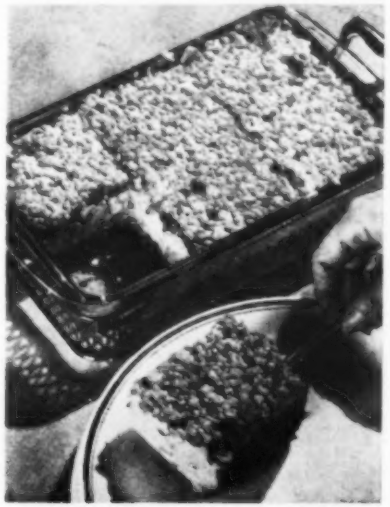
Macaroni and Cheese Squares

(Makes 6 to 8 servings)

⅓ cup elbow macaroni
1½ cups milk, scalded
1 cup dry bread cubes
¼ cup chopped pimiento
⅓ cup chopped celery
1 tablespoon minced onion
1½ cups grated process American cheese
½ teaspoon salt
Dash of pepper
3 beaten eggs
Crushed potato chips

Cook macaroni in boiling, salted water until tender; drain. Pour milk over bread cubes; add pimiento, celery, onion, cheese, and seasonings. Mix well. Add eggs and macaroni. Pour into a greased 10x6x1½-inch baking dish. Top with crushed potato chips. Bake at 325° (slow) for 50 minutes. Cut into squares to serve.

—*Mrs. Moss Scott, Kentucky*



Hearty Cheese Casserole

(Makes 6 servings)

1 cup cut spaghetti
1 can condensed cream of mushroom soup
⅓ cup milk
½ teaspoon salt
Dash of pepper
2 cups cooked peas
2 tablespoons chopped pimiento
1½ cups grated sharp process cheese
½ cup dry bread crumbs
2 tablespoons melted butter

Cook spaghetti in boiling, salted water until tender. Drain. Combine with soup, milk, salt, pepper, peas, pimiento, and cheese. Pour into a 1½-quart baking dish. Top with bread crumbs mixed with butter. Bake at 350° (moderate) for 25 to 30 minutes.

—*Mrs. William Hansen, Nebraska*

Cheese Puffs (Makes about 4 dozen)

½ cup butter
½ pound (2 cups) process American cheese, grated
1½ cups sifted flour
2 teaspoons garlic salt

Cream butter until light. Add cheese and blend. Sift flour and garlic salt together and add to creamed mixture. Roll into 1-inch balls; flatten to about ¼ inch in thickness. Bake on cooky sheet at 350° (moderate) for 10 minutes.

—*Mrs. Eunice Swender, Iowa*

Zesty Cheese Special
(Makes 4 to 6 servings)

¼ cup butter
3 tablespoons flour
½ cup milk
½ cup liquid drained from mushrooms
1 can condensed tomato soup
½ cup diced green pepper
2 3-ounce cans mushroom pieces, drained
½ pound (2 cups) sharp process cheese, grated
6 hard-cooked eggs, chopped
Chow Mein noodles

Melt butter; blend in flour. Add milk and mushroom liquid gradually. Cook, stirring constantly, until thickened. Add soup, green pepper, mushrooms, and cheese. Cook over low heat to melt cheese. Add chopped hard-cooked egg just before serving. Serve over noodles.

—*Mrs. F. J. Flam, Minnesota*

Scalloped Onions With Cheese Sauce
(Makes 4 to 6 servings)

12 small whole cooked onions
3 tablespoons butter
¼ cup flour
1½ cups milk
½ teaspoon salt
2 cups grated process American cheese

Melt butter; add flour and blend. Add milk gradually. Cook until thickened, stirring constantly. Add salt and cheese. Stir until cheese melts. Pour over hot, cooked onions.

—*Mrs. L. W. Foubert, Iowa*

Pancakes and waffles

Apple Pancakes (Makes about 12 pancakes)

2 cups sifted flour
1 tablespoon baking powder
1 teaspoon salt
1 tablespoon sugar
2 eggs, well beaten
1½ cups milk
2 tablespoons melted butter
1 cup finely chopped apples
Butter
Maple sugar or brown sugar

Sift together dry ingredients. Combine eggs and milk; add to the flour mixture gradually. Mix until smooth. Stir in melted butter and apples. Bake on a hot ungreased griddle until brown on both sides. While hot, spread with butter and sprinkle with maple sugar or brown sugar.

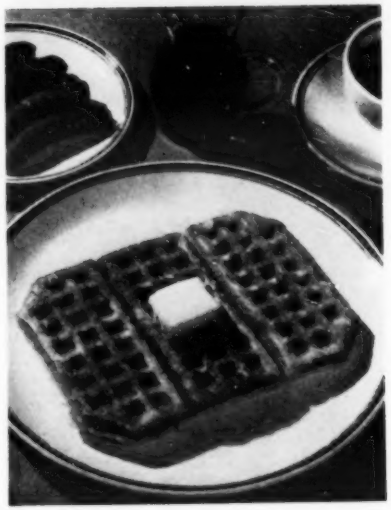
—*Miss Bertha Rohrich, Nebraska*

Corn Waffle Crisps

½ cup sifted flour
4 teaspoons baking powder
¾ teaspoon salt
½ teaspoon soda
2 tablespoons sugar
1½ cups yellow corn meal
2 eggs
1½ cups buttermilk
⅓ cup melted shortening

Sift flour, baking powder, salt, soda, and sugar together. Mix in corn meal. Beat eggs and milk together; add to cornmeal mixture and stir until blended. Add shortening and stir to combine. Bake in preheated waffle baker about 3 minutes or until golden brown. Serve with butter and hot syrup.

—*Mrs. L. W. Foubert, Iowa*



"My children like **Quaker Oats** best and I think it's best for them,"

says MRS. WM. ENYEART

Mother of Kenneth 6, Ronald 5, Edward 3, twins Richard and Randall 15 mos., and Gregory 4 mos.

Route No. 2, Brookfield, Mo.

3 reasons why farm families eat more Quaker Oats than any other cereal!

1. BEST FOR FLAVOR. Mrs. Enyeart's children – like so many farm youngsters – love Quaker Oats for its creamy smoothness and rich, delicious flavor. Such flavor is achieved by Quaker's years of experience in selecting the choicest, largest oats – in steaming and toasting them with expert care.

2. BEST FOR GROWING CHILDREN. Farm mothers know Quaker Oats helps their children grow strong, healthy bodies. Oatmeal provides far more body-building protein than any other cereal.

3. BEST FOR ECONOMY. What other breakfast dish gives you the all-morning energy of Quaker Oats – at less than a penny a serving? Serve creamy-delicious Quaker Oats tomorrow morning!

Give your growing children the high-protein benefits of Quaker Oats these tempting ways!

"BUTTERSCOTCH OATMEAL." Simply sprinkle brown sugar on top.

"CANDY OATMEAL." Just top with a few chocolate chips instead of sugar.

"RAISIN OATMEAL." Stir ½ cup raisins into the boiling water before adding Quaker Oats and cook as usual.

QUAKER OATS

MOTHER'S OATS AND QUAKER OATS ARE EXACTLY THE SAME

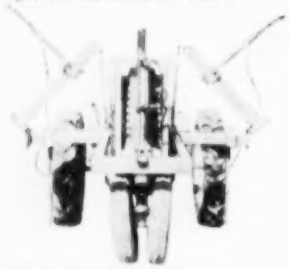
LOOK FOR CHINA, CARNIVAL WARE, CUP AND SAUCER, OR ALUMINUM WARE INSIDE MOTHER'S PREMIUM OATS

THERE IS A . . .

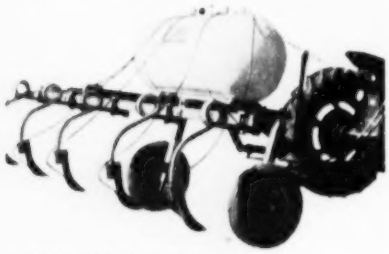
KBH

AMMONIA APPLICATOR

ANHYDROUS AMMONIA, the new, wonder 82% nitrogen fertilizer, is today's surest way of increasing farm yields and profits. And for positive field application, select the unit that *fits your farm* from KBH's complete line of Pull-Type, Rear-Mounted, and Front-Mounted Applicators. Compare all the features — ruggedness, dependable performance, and economy. You'll see why KBH is the fastest-growing name in the agricultural ammonia field.



THE KBH DOUBLE-DUTY
Powerful hydraulic cylinder on this famous, rugged front-mounted unit gives positive penetration to any depth.



THE KBH PULL-TYPE
Quick-hitch Pull-Type has high clearance, short turning radius for row crops, and extra width for broadcast application.

Other KBH models include Universal Rear-Mounted, Ford-Ferguson Rear-Mounted, and Special Pull-Type Broadcast Applicator with 500 gal. tank.

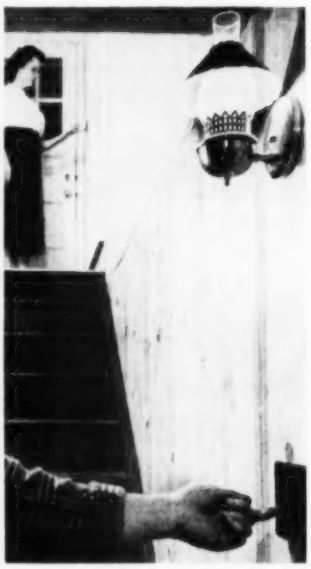
MAIL COUPON TODAY

THE KBH CORPORATION
CLARKSDALE, MISSISSIPPI
Please send Free Literature on KBH Applicators
NAME _____
ADDRESS _____
CITY _____ STATE ____

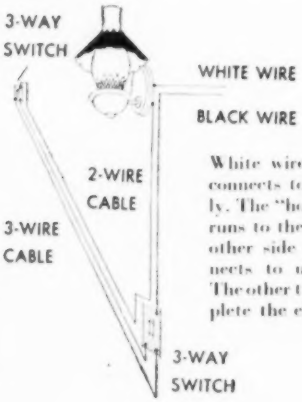
WRITE FOR FREE LITERATURE

How to

Wire a 3-way switch

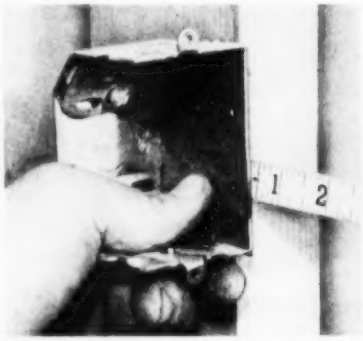


Wiring 3-way switches is easy. But if you have not done it before, you may want your own wiring diagram. When you have the wires sticking out of the boxes and only a hazy idea where the ends connect, it's reassuring to have the details drawn on paper.

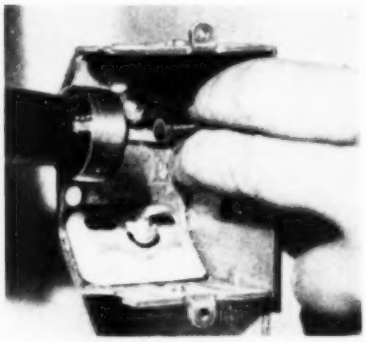


White wire from *source* connects to light directly. The "hot" black wire runs to the switch while other side of light connects to upper switch. The other two wires complete the electric circuit

Here are the steps for wiring your own 3-way switches

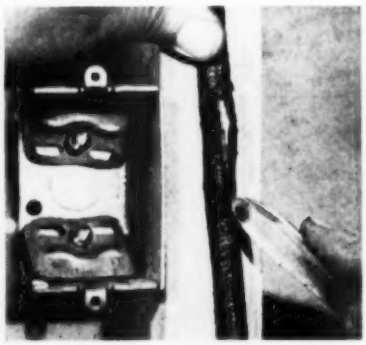


1. Locate switch box so edge extends from stud to allow for thickness of wall covering. Place it same distance from floor as other switches and in easily accessible places

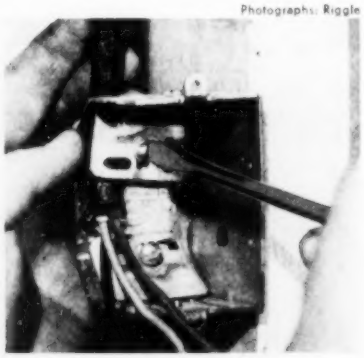


2. With side of box off, it can be nailed easily to stud. For locations between studs, special box supports are available. Several boxes may be combined if that is desired

Photographs: Riggle



3. Using sharp knife and rigid surface, slit outer insulation from nonmetallic cable. Strip the insulation so about 8" of single strand wire is exposed for you to work with



4. Thread wire through box clamp so insulation is grasped firmly. Tighten screw. This box is upper one in drawing above. Lower box has both 3-wire, 2-wire cable

More on page 72

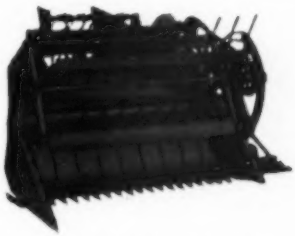
Here is *new capacity* to speed up your forage harvests . . . *new versatility* to do better work on more jobs . . . *new stamina* to stand up under your toughest conditions! It's the all-new John Deere No. 8 Forage Harvester, the sensational result of years of designing, testing, redesigning, and proving in every forage crop.

The John Deere No. 8 makes short work of all forage harvesting jobs, thanks to extra capacity in the feeding and cutting units—where true capacity is measured. Efficient feeders move the crop uniformly to the extra heavy-duty flywheel cutter which slices clean . . . builds up a powerful force of momentum to carry it through tough spots.

Three "Quik-Latch" harvesting units let you choose the method to suit the crop. Eight lengths of cut—all yours without buying extras—give you the right length of cut for every crop. Rugged construction insures years of dependable service. Be sure to get the complete facts from your John Deere dealer, or write for free literature.

JOHN DEERE
MOLINE, ILLINOIS

"Quick-Latch" Harvesting Units for Every Job



ROW-CROP UNIT

A long lower conveyor that reaches almost to the sickle of the row-crop unit, plus side chains, assures "butts first" feeding to the cutter. Gatherer points are more than 2½ feet wide to get all the crop.

MOWER BAR

Feeder teeth of the five-foot mower bar, as well as the 52-inch windrow pickup overlap . . . "strip" each other for positive, uniform feeding.

SEND FOR *Free Literature*

JOHN DEERE, Moline, Ill. Dept. G38

Please send me free literature on the John Deere No. 8 Forage Harvester.

Name.....

R.R. No.....Box.....

Town.....State.....

500 POUNDS of 10-10-10 brought 9,750 POUNDS

FORAGE YIELD INCREASE

on the farm of Armin Piel, Fountain City, Wis.

● Mr. Piel was curious as to exactly what a high-analysis fertilizer could do to improve his pasture. So, in the spring of 1951, he fertilized an acre of unplowed Kentucky blue grass with 500 pounds of 10-10-10.

His dry matter yield on that acre was 13,875 pounds and only 4,125 pounds per acre on the unfertilized field . . . an increase of 9,750 pounds. Now Mr. Piel reports that he has been using 10-10-10 ever since and that his yields, both in 1952 and 1953, have averaged the same on his entire pasture acreage as on the original test acre.

More and more farmers are finding that yields and profits grow with the use of high-nitrogen fertilizers. For nitrogen improves not only the quantity, but the quality, of pasture grasses. And application *early* in the spring starts grass growth two or three weeks earlier and prolongs the growing season . . . helps reduce feed costs. Investment in a good 8-8-8 or 10-10-10 fertilizer brings profits far higher than the cost of the fertilizer itself.

Many agronomists have urged the application of high-nitrogen fertilizers to offset the damaging effects of last year's drought.

U·S·S Ammonium Sulphate . . . better nitrogen for better yields

U·S·S Ammonium Sulphate is a top quality, kiln-dried nitrogen source material that is less corrosive to farm machinery. It is free-running . . . will not clog drills and other distributing equipment. The nitrogen in U·S·S Ammonium Sulphate will not leach out during the spring rains, but is readily available during the growing season.

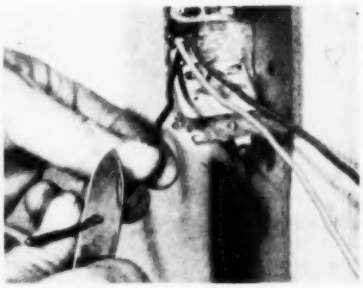
See your fertilizer dealer now about a good 8-8-8 or 10-10-10 for your pasture. Be sure it contains U·S·S Ammonium Sulphate.

U·S·S Ammonium Sulphate USS

UNITED STATES STEEL

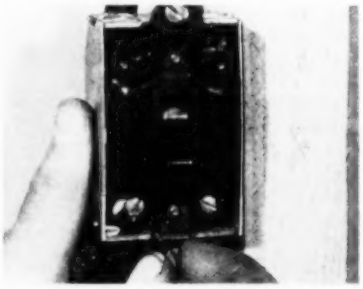
Wire a 3-way switch

From page 70



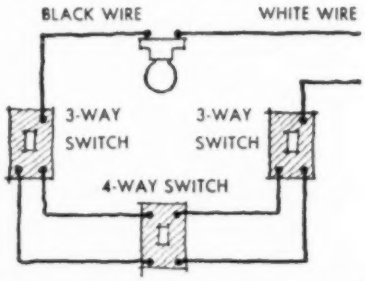
5. Strip plastic insulation from individual wires. Don't cut into wire itself. Expose enough wire to enable you to grasp the end and wrap it around the terminals by hand

6. With fingers, wrap the individual wires around appropriate terminal in clockwise manner. Tighten screw and cut off extra wire. Use wiring diagrams for needed help

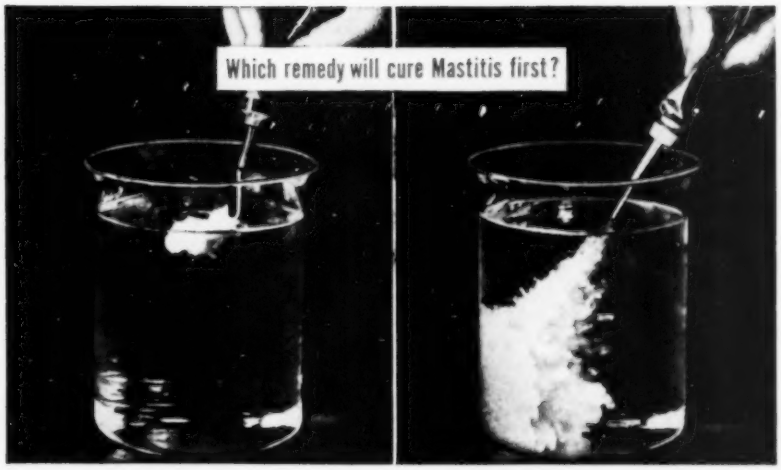


7. Replace side of switch box. Fold wires in behind switch and push switch into the box. *Wire splices*, like you'll have in the lower box, should be soldered and taped

Here's how to control a light from more than 2 places



To control light from 3 places, start with a 3-way switch set up as described. A *4-way* switch between the 3-way switches will also control the light. You can put as many 4-way switches *between* the 3-way switches as you need places to operate your lights



Contains grease, wax or oil. Test the udder infusion you have been using. Will it dissolve in water or warm milk? Does it release antibiotics fast? Then how can you expect to cure mastitis quickly before it gets a firm foothold in the udder?

New liquid Terramycin Animal Formula for Mastitis disperses instantly in warm milk in the udder. Wonder-working Terramycin is dispersed to hit infection in a matter of seconds. Make this test yourself. You can see it go to work.

Disperses Instantly; Hits Mastitis Fast

Squeeze any grease or wax base mastitis ointment into a bowl of warm water. See how it lies in an oily blob on the surface.

What about the medication inside that blob of "goo." Can it hit infection racing swiftly to every section of the quarter?

Now squeeze an equal amount of Terramycin Animal Formula for Mastitis into a bowl of water.

See how it disperses instantly. See how the antibiotics start to work in seconds.

Remember this test when mastitis strikes. Ask for new Terramycin Animal Formula for Mastitis.

New, Fast-acting Liquid Udder Infusion in Tubes

Terramycin®

BRAND OF OXYTETRACYCLINE

ANIMAL FORMULA

for MASTITIS

One tube clears up most cases; leaves no greasy, waxy deposits

Here's the newest development in treatment of mastitis. It's wonder-working antibiotic Terramycin in fast-acting liquid form.

Terramycin Animal Formula for Mastitis with Polymyxin B Sulfate is a *liquid* udder infusion in tubes. It actually disperses instantly in milk. It starts to work in seconds because it contains no thick, gummy grease, wax, or oil.

One tube clears up most infections in only 12 to 24 hours, even many difficult cases, thanks to this new antibiotic combination effective against a wide range of mastitis organisms.

There is no greasy residue, no waxy deposits left in the udder. New Terramycin Animal Formula for Mastitis milks out completely.

Get new liquid Terramycin Animal Formula for Mastitis at the first sign of infection. Use it for scratches and other injuries, too.

Your animal health headquarters now has new liquid Terramycin Animal Formula for Mastitis with Polymyxin B Sulfate.

Pfizer

Chas. Pfizer & Co., Inc.
Brooklyn 6, New York
World's Largest Producer of Antibiotics

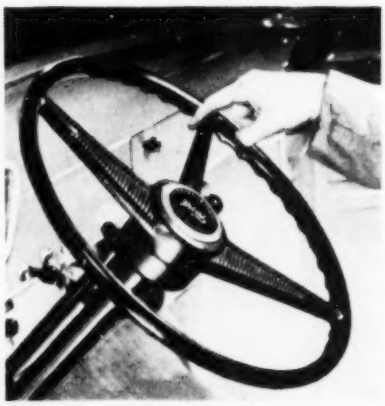
TRIPLE ECONOMY

It's the biggest truck news of '54

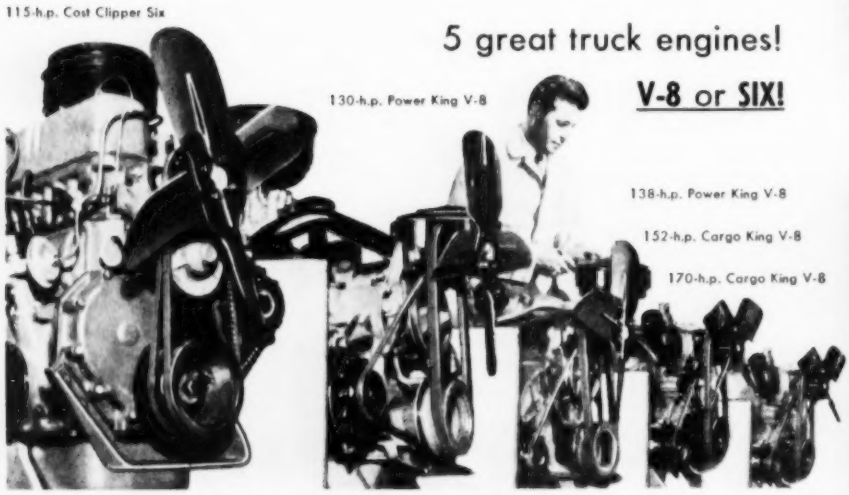
Never before have so many important advancements been made in all the 3 biggest truck savings-areas as appear in the NEW Ford Trucks for '54! The mightiest concentration of power per cubic inch ever built into any truck engine line! Better working facilities for the driver. Bigger capacities too!

New Ford Trucks for '54 offer important *money-saving* advancements you just can't get in any other trucks. Take engines, for example. For the power they develop, Ford Truck engines for '54 have less cubic inch displacement than engines in other-make lines.

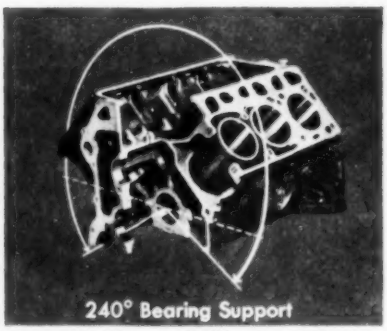
For instance, Ford's 239-cu. in. *Power King* V-8 develops its 130 h.p. on as much as 43 cubic inches less displacement. *Every cubic inch of displacement in an engine is a "hungry inch" that demands gas.* Small-displacement engines normally need *less* gas. And that's only *one* big factor behind Ford Truck *Triple Economy* for 1954.



NEW Ford Master-Guide Power Steering standard on Series T-800, optional at extra cost on most other BIG JOBS! Cuts steering effort as much as 75%.



Only Ford gives you Gas-Saving, LOW-FRICTION, High-Compression, Overhead-Valve, Deep-Block engines in ALL truck models! All with advancements like Ford-designed overhead rotating valves for longer valve life, short-reach manifolds for higher breathing efficiency.



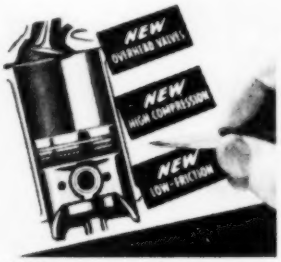
Smooth power! NEW Deep-Block design! Ford engine blocks have deep-skirt crankcases, wide-base flywheel housings, for high structural rigidity.

1. NEW LOW-FRICTION engines offer power increases up to 23%! One reason for greater power *with gas-saving economy:* new wedge-shaped combustion chambers create higher turbulence, burn gas more completely, without pre-ignition.

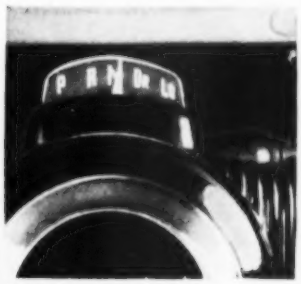
2. NEW 3-MAN DRIVERIZED CABS for easier, safer control! For economy that results from keeping the driver *fresh* on the job! Exclusive Ford seat shock snubbers. New woven plastic upholstery "breathes" like cloth. Huge curved one-piece windshield for visibility unlimited!

3. NEW Capacities! 6-Wheelers, Cab Forwards, over 220 models! Ford's new line goes all the way from Pickups to 60,000-lb. GCW BIG JOBS—new factory-built 6-wheelers—two more giant Cab Forward Series. Minimum dead-weight increases payload capacities.

ONLY Ford has DRIVERIZED CAB comfort! Deluxe Cab shown has foam rubber seat padding, plus 15 other custom extras (at extra cost).

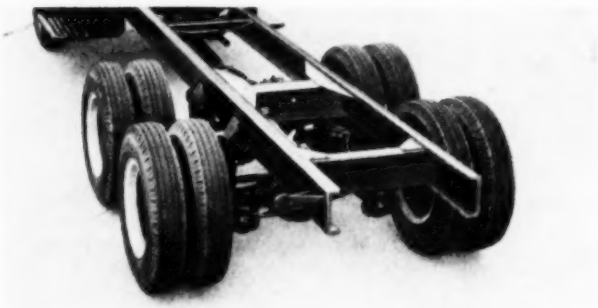


NEW Ford engines reduce friction losses up to 33%! Short-stroke design cuts internal friction, delivers more usable power per gallon of gas.



NEW Fordomatic Drive saves driver time and energy. Fully automatic! No clutching! No shifting! Available in all Ford light-duty models for '54.*

NEW Vacuum Boosted Power Brakes now available on half-tonners make stopping up to 25% easier.* Pressure needed to stop truck won't break light bulb.



For '54, Gross capacities increased up to 48% with two all-new Tandem-Axle BIG JOBS. Rated up to 60,000 lbs. GCW! Four wheelbases, 144 in. to 192 in. Priced with the lowest. Ford-designed chassis with Ford-installed tandem axles.

*All items marked by an asterisk in this advertisement are available at worth-while extra cost

Farm Favorite—new F-600 ("2-ton"). Choice of three LOW-FRICTION engines.

FORD *TRIPLE ECONOMY* TRUCKS

MORE TRUCK FOR YOUR MONEY

FAMOUS "FIRSTS" in American FIRE PUMPS

Colonial Pumper—One of the first practical fire pumpers of Colonial times was this interesting but rather crude device, hand-filled and pumped by volunteers.

America's First and Finest FUEL PUMP

Fire pumps developed slowly through the years. Equally slow was the development of a reliable method for supplying fuel to car, truck and tractor carburetors. AC engineers solved the problem with the fuel pump. A complete and amazing success, it replaced unreliable gravity and vacuum fuel systems.

America's "*first*" Fuel Pump, steadily improved over the past quarter century, is still the "*finest*." It is literally the heart of an engine. No other part of your car, truck or tractor works harder than the fuel pump. At the first indication of wear it should be replaced with a new one, eliminating the possibility of an annoying and expensive failure on the job.

AC FUEL PUMPS

Equipment on 9 out of 10 vehicles on the road

AC SPARK PLUG DIVISION GM GENERAL MOTORS CORPORATION

Farm half the county?

From page 45

sons were home. Then, in 1948, when his youngest son enrolled at the University of Missouri, Eaton knew he couldn't handle the home farm *and* the rented land alone. And by this time, with the three sons and three daughters all away from home, the Eatons decided to slow down a bit. But, after slowing down and changing his farming program, Eaton had a surprise. A check of his record books showed he is now making a *higher net profit* with *less* land, *less* help, and *less* hard work than before the change.

What's he done to make this increased net profit possible? He's renovated—torn up old poor pastures and fields, fertilized heavily, terraced, and seeded down—110 acres of his 160-acre farm, and built ponds to put water in all fields and to stop erosion—and furnish a little fishing.

He has stopped growing wheat, corn, and row crops, replacing them with the legumes and grasses which give the most feed per acre. And he is concentrating on a beef-cow herd to use the pasture and hay profitably. He's cut his machinery investment by two-thirds and has drastically cut his farm expenses—except for fertilizer.

In short, he is concentrating on getting top hay and pasture yields on his own acres, then selling that forage through beef cattle. (He's getting out of dairy cows because they're too confining.)

From the start, Eaton has had help from soil conservationists of the Clay County Soil Conservation District. First step was having the soil tested in each field. He then built terraces, put on the lime and fertilizer that was needed, and made seedings of high-producing grasses and legumes. This renovation cost him between $30 and $40 an acre. The average field got 2 tons of lime, 1,000 pounds of rock phosphate, and 200 pounds of available potash per acre. Then he put on 100-150 pounds of a starter fertilizer, like 8-24-8, with the new seeding.

In making the change-over, he completely renovated about 15 acres a year. He did it a field at a time because "the cost doesn't hit so hard that way. I can put in about 15 acres and pay for the job *out of profits*, instead of borrowing up to the hilt to do 60 acres at a time. Also, there's less land out of production in any one year, and I spread the risk of a seeding failure," Eaton explains.

He says he's completed most of his changes now. He now has nearly 70 acres of an orchard grass and Ladino pasture, 15 acres of fescue pasture to which he plans to add some Ladino clover, 11 acres of straight alfalfa for hay, 11 acres of alfalfa-brome for hay, and about 50 acres of bluegrass. (He has to make some hay from the orchard grass and Ladino pasture because the cattle can't keep it eaten down in the spring.)

He's going to renovate more of the bluegrass pasture, but he'll keep some

bluegrass for the cattle to run on during the winter and wet weather.

Eaton keeps established stands productive with fertilizer top-dressing. He reseeds a field a year if there's a field that's not doing well. When he reseeds a field, he always tests the soil and puts on needed fertilizer.

Under his present system, Eaton has fair to really good pasture 7 to 8 months out of the year. He can move cows from bluegrass to orchard grass-Ladino pasture in April. He says the orchard grass is an especially early starter.

For the balance of the year he likes to have 4,000 bales of hay in barns. His hay barns are in the field so hay doesn't have to be hauled far *to* the barn in putting up bales, or *from* the barn when feeding it. Feeding hay in the field puts the manure where it belongs.

On the livestock side, Eaton is aiming for 50 beef cows—and according to Glen Burk, soil conservationist, he can raise enough hay and pasture to handle the cows and calves with no trouble. He'll sell yearlings off the second year of grass at about 700 pounds. When he gets his program changes completed in a couple of years, Eaton's income will be from these 50 yearlings a year. While he's building up his beef-cow numbers, he's been buying about 15 head of calves in the fall to run through winter and summer.

He's been changing over from a dairy herd to a beef herd at a minimum cost—*by breeding his Holsteins to Angus bulls.* He says the first-cross calves gain fast but lack quality. After the second cross, the calves have good beef quality. An advantage of this change-over plan is that the cow herd milks better, getting more weight on the calves—even after several generations.

Eaton now has 6 purchased purebred Angus cows, 7 half-breeds, and 8 three-quarter-breed cows—plus yearlings and 2-year-olds coming on. As the three-quarter breeds have calves, he sells the half-breed cows. Of this system of changing over, he says: "When I make a dollar it's mine. I don't have to pay out money for a whole new herd of cattle of a different breed." Now that he's down to 9 dairy cows, Eaton figures he'll sell them during the next two years and buy beef cows with the money.

As he hasn't raised any corn since 1948, he doesn't feed his 9 dairy cows any grain. He does buy some 16- to 18-percent-protein dairy feed. He sells Grade-A milk in Kansas City.

He goes in and out of the hog business, depending on the price outlook. He buys corn for hogs if he feeds them.

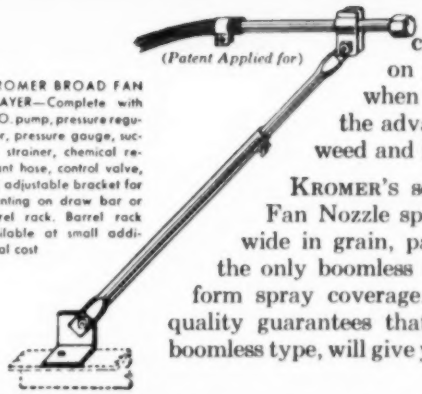
When he started his change-over, Eaton planned a 3 year rotation of corn and 2 years of grass. But, he says, it was about as much trouble to care for a few acres of corn as 100 acres. So, after the first year, he decided to go all the way and try an all-grass program.

Now he's going to stick to the all-grass system because, "From my experience to date, I can see no reason why a man can't make an easy living with all grass." **END**

HERE ARE DOLLAR SAVINGS THAT MAKE SENSE TO FARMERS

ONLY *$74.50 F.O.B. FACTORY

KROMER® BROAD FAN SPRAYER



*KROMER BROAD FAN SPRAYER—Complete with P.T.O. pump, pressure regulator, pressure gauge, suction strainer, chemical resistant hose, control valve, and adjustable bracket for mounting on draw bar or barrel rack. Barrel rack available at small additional cost

NOW for only $74.50 you can have a complete sprayer on your farm. You can spray when spraying is needed to get the advantages offered by chemical weed and insect control.

KROMER's sensational single-tip Broad Fan Nozzle sprays a swath up to 50 feet wide in grain, pastures, or row crops. It is the only boomless type nozzle that gives uniform spray coverage. KROMER's reputation for quality guarantees that no other sprayer, of the boomless type, will give you better results.

WRITE FOR FREE FOLDERS...

Our folders contain money-saving sprayer facts on Broad Fan Models, Tractor Models, Trailer Models and Sprayers for Fertilizer Application. Write us today.

BROAD FAN MODELS
TRAILER MODELS
TRACTOR MODELS
CHEMICAL WEED CONTROL

O. W. KROMER CO.
DEPT. 326, MINNEAPOLIS 11, MINNESOTA

Grow plants with ease—use
TOM THUMB FLATS
with VITA-PLANT Bands

Nourish new plants, prevent root shock when transplanting. Gain 1-3 weeks' growing time. Flat size 8½" x 6½" x 2½". Flat and 12 bands, 30¢. 5 for $1.25. 10 for $2.00 postpaid.

SNAPDRAGON GARDEN

Beautiful tall spikes of rust-resistant snapdragons. One full-size packet of each of following colors: rose, white, pink, crimson, yellow, cherry. All 6 packets, postpaid - - - 25c

Send Today For Your
FREE SEED CATALOG
Our 67th year. Big free 80-page catalog features many new items. Here are just a few: Cactus Flowering Zinnia Blaze, 25¢ pkt. (2 pkts. 45¢) Wisconsin Golden 900 Hybrid Sweet Corn - - - 15¢ pkt. (2 pkts. 25¢) Bells of Ireland, 20¢ pkt. (2 pkts. 35¢)

L. L. OLDS SEED CO.
DEPT. 17 MADISON 4, WIS.

STRAWBERRY PLANTS
Write for catalog, fully describing all varieties, with best methods of growing them. Satisfaction Guaranteed.
J. H. SHIVERS, 54 Main St., Allen, Md.

Minnesota Everbearing
HYBRID "C" CUCUMBER

Earliest of all! For pickling and slicing

Disease resistant. Yields big crops where others fail

Bears 'til frost!

Bears continuous heavy crops of uniform, beautiful rich-green fruits. Crisp, firm, sparkling-white flesh. Make perfect dill or sweet pickles when small. Read about new Minnesota Hybrid vegetables in big, colorful Seed & Nursery Catalog. Sent FREE! Write today!

76-page catalog FREE!

FARMER SEED & NURSERY
12 S. 19th, FARIBAULT, MINNESOTA

See how Butler steel farm buildings provide more usable and permanent cover at lower cost—for all your farm building needs. See ad on opposite page.

Save feed...cut chore time with new BUTLER "Big Ham®" feeder

You can fill this new heavy-duty Butler "Big Ham" with a supply of feed . . . and forget the daily drudgery of carrying feed to your hogs! Its big, weather-tight, galvanized steel hopper makes it easy to keep a fresh, clean ration before your hogs constantly for fast, thrifty gains. And with a choice of 4, 8, 12 and 16-lid sizes, you can feed from 20 to 80 hogs with only one "Big Ham" feeder! "Big Ham" is hog-strong—heavy-duty. See features below.

See your Butler dealer. Have him show you the new Butler "Big Ham" hog feeder... also the full line of Butler stock tanks with hog fountain. Or send coupon for name of your nearest Butler Blue Ribbon dealer, also free folders.

Compare BUTLER'S construction with other feeders you've seen

1. **Armored for abuse**—20-gauge galvanized steel body, reinforced for big hogs.
2. **Full-depth partitions**—Prevent mixing of different feeds and supplements.
3. **Dependable agitators**—Activated by hogs to keep feed from bridging in hopper.
4. **Adjustable feed regulators**—Let you set feed flow quickly, even when full of feed.
5. **Sturdy skids**—Equipped with clevises for fast hitching and easy moving of feeder.
6. **Replaceable parts**—Bolted construction makes repairs simple, low cost.

For prompt reply, address office nearest you:
BUTLER MANUFACTURING COMPANY
7484 East 13th St., Kansas City 26, Mo.
984 Sixth Ave., S. E., Minneapolis 14, Minn.
923 Avenue W, Ensley, Birmingham 8, Ala.
Dept. 84, Richmond, Calif.

Please send me the name of my nearest Butler dealer, also more details on Butler Blue Ribbon hog equipment.

Name _____
P. O. _____
R. F. D. _____ State _____

BUTLER STEEL PRODUCTS

Manufacturers of Oil Equipment
Steel Buildings • Farm Equipment
Cleaners Equipment • Special Products

Factories located in Kansas City, Mo. Galesburg, Ill. • Richmond, Calif. Birmingham, Ala. • Minneapolis, Minn.

Poultry

Soybean oil meal good source of protein

Chicks on a soybean oil meal-corn ration—fortified with vitamin B_{12} and riboflavin—grow just as rapidly as those on a ration containing animal proteins. Heretofore, animal proteins (which are high in vitamin B_{12} and riboflavin) have been found best for use in poultry rations.

Researchers at the Missouri Experiment Station found that soybean oil meal is especially good with a corn mixture. It is slightly deficient in amino acids containing sulfur. But corn protein contains relatively large amounts of these amino acids.

• • • •

Clean eggs in one basket, dirty ones in another

Art Prosser, Orange County, New York, puts all his eggs in two baskets at pickup time. He hangs a little wire basket onto the big one. Clean eggs go into the regular basket, the dirties into the small one. Only the dirty eggs are washed.

• • • •

Moves eggs with egg-basket carrier—saves steps

An egg-basket carrier has cut carrying of egg baskets to a minimum for Melvin and Herbert Thomas, Stillwater, New York. A 225-foot cable runs between the poultry house and the egg room, located in the basement. The carrier (pictured below) handles from 8 to 10 baskets. A ⅜-inch cable is used.

Photograph: Huckle

pointers

How safe is arsanilic acid in poultry rations?

Recently we've been hearing a lot about using arsanilic acid in poultry rations to stimulate growth and production. The first question that pops into most people's mind is "how about the 'build-up' possibilities or the arsenicals."

In a limited 17-week test at Michigan State College, researchers found the accumulation of arsenic in eggs and tissues was well below allowable levels.

Three groups of 20 pullets were included in the test. One group was fed a basal ration—the other two groups were fed 90 grams (the recommended amount) and 180 grams of arsanilic acid per ton.

A 2-year test on the "build-up" possibilities of the arsenicals is now under way.

• • • •

How much does it cost you to produce 1 dozen eggs?

Most poultrymen don't keep enough records to determine their costs at any particular time.

However, a method of determining costs simply and quickly (with reasonable accuracy) is suggested by K. S. Carpenter of Cornell's Agricultural Economics Department. Here's his formula for estimating the annual average costs per dozen eggs:

Feed: 7.2 pounds times the price per pound.

Labor: 11 percent (.11) times the value per hour.

Depreciation: 3.5 percent (.035) times the farm value per bird, live weight.

Other costs: 13 percent of total of feed, labor, and depreciation costs.

The total of these 4 items is the average annual cost of producing 1 dozen eggs.

• • • •

Best controls for red mites and lice

Lindane, sprayed in combination with either nicotine sulfate or DDT, has been found the most effective all-round control of external chicken parasites.

Four-percent nicotine sulfate with ¼-percent lindane, or 4-percent DDT with ¼-percent lindane, will control both chicken red mites and the various species of lice in a single operation. Lindane may be used alone for lice, and DDT or nicotine sulfate for red mites.

The insecticides can be applied in two different ways. For lice, which spend their entire lives on the birds, spray only the roosts of the house with either a knapsack sprayer or power sprayer. For red mites, which live in crevices in all parts of the house and are on the birds only at feeding time, spray all areas liberally.

Read about a better way to feed your hogs — and water your livestock too — with Butler Blue Ribbon Farm Equipment. See the ad on opposite page.

"Parking tall, wide machines is easy in my post-free BUTLER building"

says L. S. Klinedinst, Granger, Ind.

"The big doors at each end of my Butler steel building make it easy to get in and out with tractors and tall, wide equipment. The post-free floor space lets us quickly park machinery where it is easy to get in or out as we need it.

"This ease of storing saves many hours of time every year—encourages us to keep our machinery under cover even during its season of use. My 32' x 144' x 10' Butler steel building provides low-cost shelter for equipment I recently purchased to expand my farming operation. Longer implement life and better trade-ins will help me pay for my Butler building," says Mr. Klinedinst.

There's a Butler steel building in the size and type to exactly fit your needs. It can be quickly erected—easily expanded. Steel or aluminum sheeting.

See your Butler dealer today . . . or mail coupon below for his name and location, plus free Butler farm building booklets.

"I save $300 a year repairing my own equipment in the convenient shop I've set up in one end of our Butler building. With all-steel construction, we're not worried about fire. We even weld farm equipment," states Mr. Klinedinst.

BUTLER STEEL PRODUCTS

Manufacturers of Oil Equipment
Steel Buildings • Farm Equipment
Cleaners' Equipment • Special Products

Factories located in Kansas City, Mo. Galesburg, Ill. • Richmond, Calif. Birmingham, Ala. • Minneapolis, Minn.

For prompt reply, address office nearest you:

BUTLER MANUFACTURING COMPANY

7484 East 13th St., Kansas City 26, Missouri
984 Sixth Ave., S. E., Minneapolis 14, Minnesota
923 Avenue W, Ensley, Birmingham 8, Alabama
Dept. 84, Richmond, California

Please send me the name of my nearest Butler steel building dealer, also free booklet on Butler steel farm buildings.

Name

P. O.

R. F. D. State

Undying Evidence of Respect and Tribute

Many famous families and individuals have had their memories enshrined forever in Barre Granite. By their accomplishments throughout a full life they have proved worthy of everlasting glory.

FOR EACH FAMILY . . . EACH INDIVIDUAL THERE'S A BARRE GUILD MONUMENT THAT SAYS: "WE SHALL NEVER FORGET"

The finest tribute of remembrance is a BARRE GUILD Monument. Barre Granite is so hard and fine grained that it withstands the ravages of time and the elements. There is a monument to suit every personality . . . every family . . . every purse.

Only from Barre, Vermont, comes this rare monumental stone known as Select Barre Granite. Look for the sign of the BARRE GUILD dealer nearest you – and insist on the BARRE GUILD seal etched into the monument you buy . . . each monument backed by a *written guarantee.*

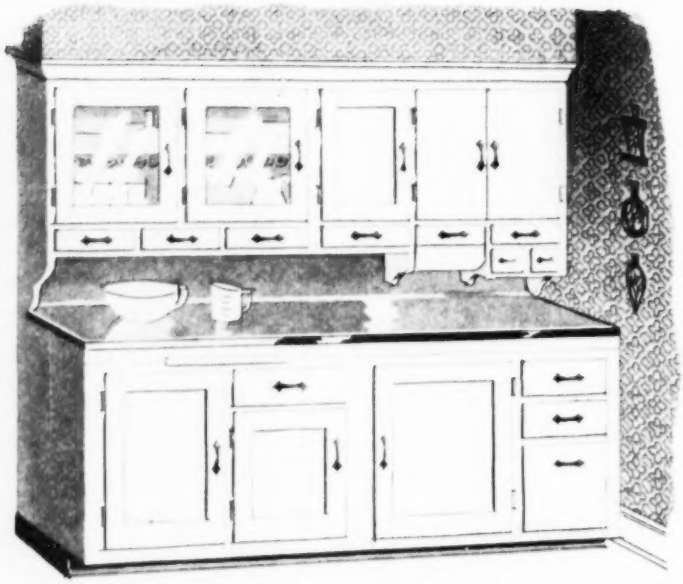
Prepare now before Bereavement Comes

Plan today, while all the family is together, to buy your own cemetery property and erect a family monument suited to your budget.

BARRE GUILD **Monuments**

"Mark of the Masters"

FREE BOOKLET – Write for illustrated booklet, full of helpful guidance in selecting your family monument. BARRE GUILD, BARRE 42, VERMONT



The two old cupboards (shown at bottom of this page) were combined to make this big, easy-to-clean cabinet

Grandma's cupboard goes modern

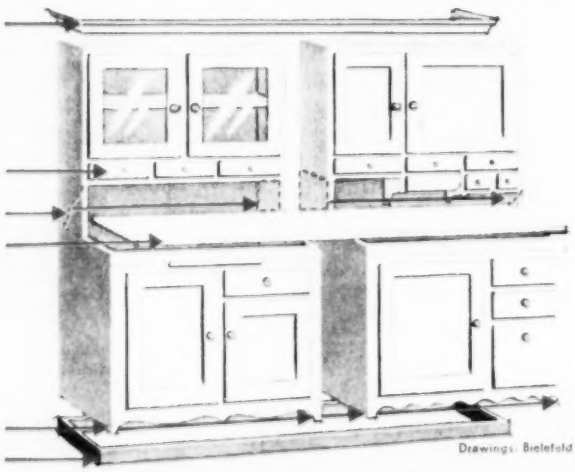
The old cupboard on your back porch may be the makings of a convenient "built-in" cabinet in your kitchen. Or, two of them can be combined for a doubly useful unit.

Old cupboards were dirt catchers. Correcting this is simple: Close the space beneath the cupboard; use plywood furring to seal off the space from cabinet top to ceiling; and "cove" the counter top and splash back with a continuous piece of surface-covering material.

The new base should be recessed at the front to provide toe space, and it should raise the counter to a comfortable height. Reverse door openings where needed for convenience—and add smart new hardware for good looks

A few nails, a little know-how, and an old-time cupboard is back in service!

A handsome new cabinet from two old ones. Here's how:

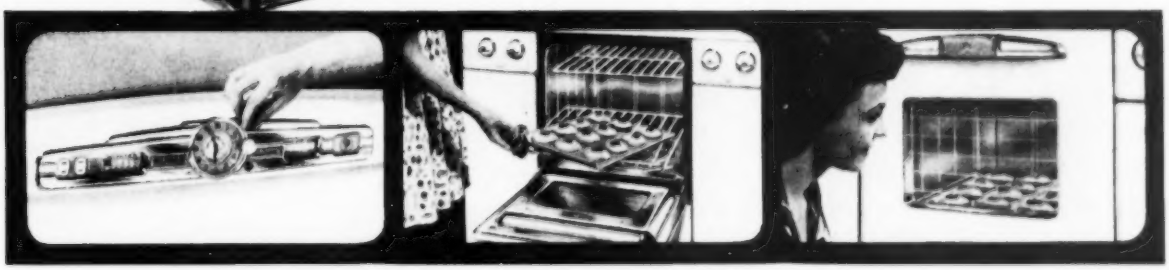


The steps are easy, the cost is low—and you get a practical kitchen cabinet with lots of storage and work space

Wonderful Cakes
. . . Cookies . . . and
Complete Meals—
automatically yours
with a

TAPPAN
GAS RANGE

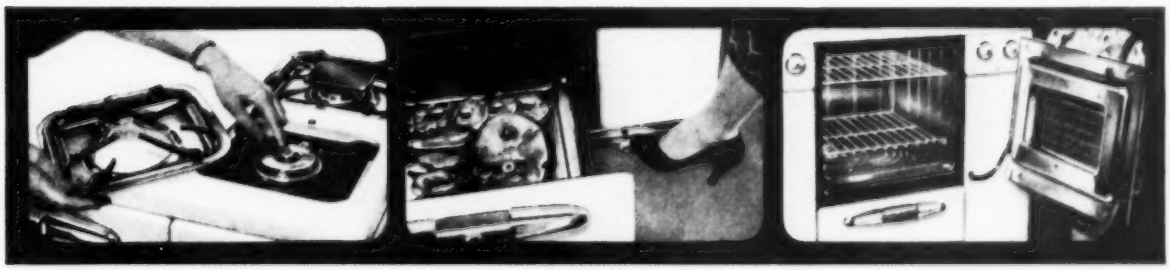
"You'll be the best baker in the block with your Tappan—and *without* being tied to your kitchen. Because your Tappan takes over . . . . from dinner to dessert . . . while *you* take it easy. Look . . .



"Just set Tappan's Tel-U-Set. The oven starts itself . . . holds the temperature you want . . . stops itself—all *automatically*.

"M-m-m! They'll be delicious—with plenty for everybody. And you can bake in *any* rack position in this *big* chrome oven.

"Want to see how things are coming? Simply peek through Tappan's Visualite Oven Door. Certainly beats heat-wasting door-openings!



"Here's *precision* cooking. Contro-lo-Heat top burners provide every possible cooking heat, including low 'keep warm' setting.

And for flame-kissed meats . . . you'll love this smokeless Broiler! A touch of your toe on the Pres-Toe pedal . . . and out it comes.

"Yes . . . all cooking's easier—and *cleaning*, too. This Lift-Off Oven Door lets you easily clean every corner of your oven."

TAPPAN GAS RANGES

In Models to Fit Every Kitchen — Every Budget . . . for City Gas, Philgas and Other LP (Bottled) Gases

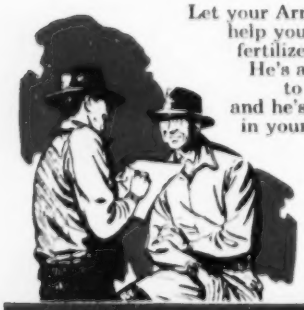
THE TAPPAN STOVE COMPANY, Dept. SF-34, Mansfield, Ohio

Crop Records Prove It!

Higher Yields, More Profit with Armour BIG CROP®

BIG CROP gets *your* crops off to the right start, makes deeper root systems, stronger healthier plants. And BIG CROP works throughout the growing season to bring faster maturity and full, high-quality yields that mean more profits at harvest time.

BIG CROP is prepared in an analysis for crops and soils in your section. You'll always find BIG CROP in good mechanical condition—properly aged and cured to drill easily and evenly. See your friendly Armour agent right away and be sure your BIG CROP is on hand when you need it.



Let your Armour agent help you with your fertilizer program. He's a good man to depend on and he's interested in your problems.

ORDER EARLY!

Get your Big Crop now while your Armour agent has a good supply. Don't wait until the last minute. Prompt delivery on late orders may be difficult.

Look For The Big Armour !

ARMOUR FERTILIZER WORKS

MORE FARMERS USE ARMOUR'S

Infrared brooding—

for fast, handy heat

By John B. Mowbray

It's the "best thing since the hen," say many who've used infrared lamps for brooding chicks. Here's why:

Heat is instant—no warmup period is required. And it's safe (if properly wired) because no open flame is used. Initial investment is small, and most of the equipment can be constructed from scrap materials found around the farm.

There's less labor involved in cleaning, feeding, and watering. The amount of heat can be regulated in a jiffy by raising or lowering the lamps.

The bottom of the lamp should be 18″ above the litter for the first week or two. Then the lamp can be raised from 1″ to 3″ each week until a maximum of from 24″ to 27″ is reached. When chicks are 1 month old, the lamp can be turned off during the afternoon when outside temperatures reach 40 or 50 degrees.

The energy from infrared lamps passes *through* the air without warming it. Only when it strikes a solid object (chicks or litter) does it generate heat. Since the air doesn't get warm, a thermometer won't always give an accurate reading.

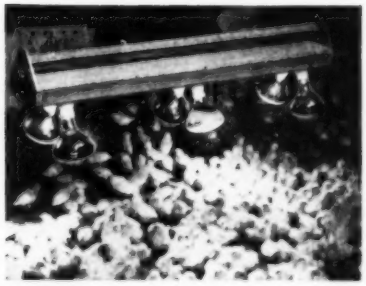
So how do you tell if the chicks are too hot or too cold? Simple. Just watch how the chicks act.

Contented chicks will scatter out over the heated area. Cold chicks will bunch up under the lamps. By raising or lower-

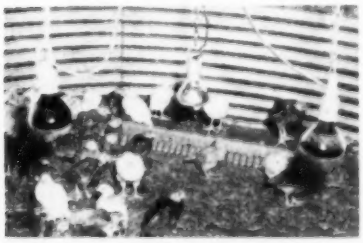
◀ Cluster of lamps mounted in a central location can be hooked to a thermostat to regulate number of lamps used at one time

Photographs: Mowbray; Hufnagle

Scrap lumber suspended from ceiling makes a low-cost holder for lamps. When mounted in rows, lamps should be spaced 24" apart



To prevent overlapping of heat area, all lamps mounted in pairs should be placed at an angle. Otherwise, the heat is wasted



Single lamps are added if size of flock expands. Lamps should never be hung from the cord. Use a chain, wire, or a bracket

ing the units, you can tailor the heat to fit the situation. In addition, the chicks can choose the temperature they like best by moving from the center, where it is hottest, to the cooler outer edge.

One 250-watt lamp will brood 60 chicks during the winter season. In the spring it will take care of 75 chicks.

You can get 125-, 250-, and 375-watt lamps. For average conditions the 250-watt size is satisfactory. Don't use more than three 250-watt lamps on a 10-ampere switch. If you intend using several lamps, better have the local power supplier check your wiring first. **END**

IT'S GOOD BUSINESS to Farm with Vertagreen®

You get more plant food for your money, your crops get extra growing energy that pays off in highest-quality yields and bigger profits when you farm with energized Vertagreen.

Every year thousands of farmers report new crop records, amazing growing results with Vertagreen. Extra strength, perfectly blended Vertagreen feeds crops completely, helps carry them through dry weather and provides real growing power from planting right through to the harvest.

And Vertagreen actually costs you less in the long run. See your friendly Armour agent today. Ask him for Vertagreen in the analysis especially prepared for crops and soils in your section.

ORDER NOW!

Be sure. Have Vertagreen on hand when you need it. Get your order in now. Prompt delivery may be difficult on late orders.

ARMOUR FERTILIZER WORKS

MORE FARMERS USE ARMOUR'S

Types of WOOD CHIPS you can get with a FITCHBURG CHIPPER

KEY

1 Maple Brush, Straight Blades, set 1/8" (Mulch)

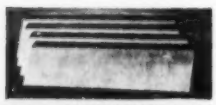
2 Green and Dry Pine Slabs, Serrated Blades, set 3/32" (Poultry Litter)

3 Pine Board Butts, Serrated Blades, set 1/16" (Stable Bedding)

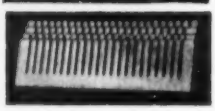
4 Dry Oak Pole Wood, Serrated Blades, set 1/16" (Stable Bedding)

5 Green Pole Wood, Serrated Blades, set 1/16" (Stable Bedding)

When you own a Fitchburg Chipper, you benefit three ways. First, you can convert woodland thinnings into valuable wood chips for low-cost mulch, poultry litter and stable bedding. Second, at the same time you give new life to young trees—eliminate the fire hazard of dead brush, undergrowth and fallen limbs. Third, manured wood chips provide an excellent soil amendment, and handle well with a spreader.



STRAIGHT BLADES
Excellent for brush. Make ideal chips for mulch.



SERRATED BLADES
Produce chips ideal for poultry litter, stable bedding.

FREE FOLDER
Send for yours today!

Contains money-saving suggestions and details for using wood chips as mulch, poultry litter, stable bedding. Outlines ways to make extra money with a Fitchburg Chipper, gives technical data, diagrams, specifications, etc.

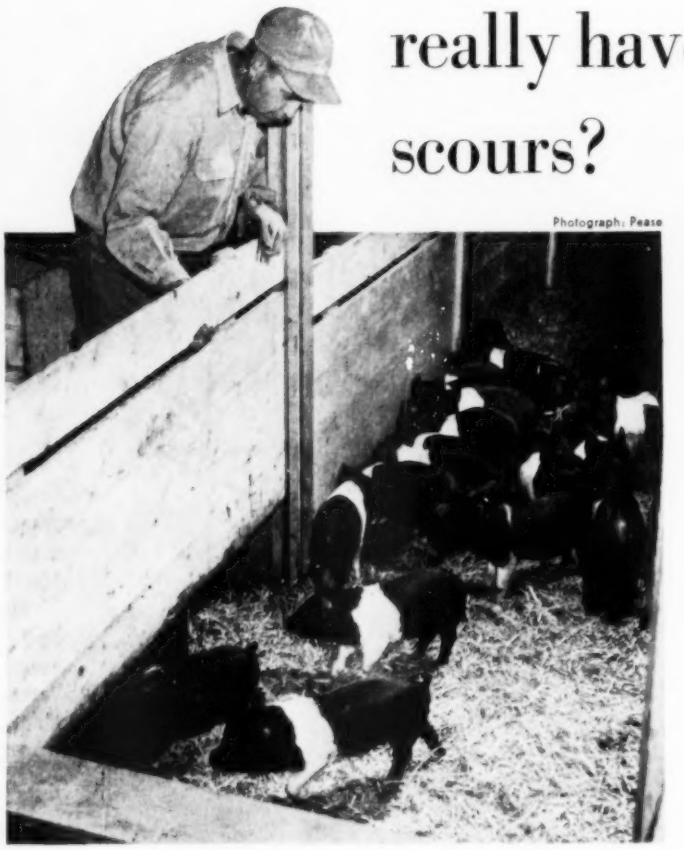
Fitchburg Engineering Corp.
Dept. 10, Fitchburg, Massachusetts
Send me the new Fitchburg Chipper Folder. I am interested in Wood Chips for:

Please Check ☐ Soil enrichment ☐ Stable bedding ☐ Poultry litter ☐ Garden or berry mulch ☐ Farm roads, field lanes ☐ Fruit tree mulch

Name _____
Address _____
Town _____ State _____

SALES FRANCHISES
A few sales franchises are open for well-staffed farm machinery specialists. Tell us the territory you cover.

Do your pigs really have scours?



Photograph: Pease

Keep an eye on pigs for signs of scours; make sure of the trouble before treating

Can you tell the difference between normal looseness and scours? If not, this article may save you time, money, and a crop of pigs

By Dr. W. N. McMillen

Pig scours is not a disease in itself. The diarrhea is a symptom that something is abnormal. The trouble may result from (1) poor management, (2) unbalanced rations or underfeeding, (3) infectious disease, (4) susceptible breeding stock, or (5) just cold, damp weather.

"I had to take my pigs off that Ladino clover pasture because it was scouring them." That's what a man in Logan County, Illinois, told me last spring. Then I found out that several of his neighbors had done the same thing with their pigs.

After checking into the matter further, I am sure the trouble was not scours caused by infection. This kind of trouble usually is normal looseness caused by increasing milk flow of the sows when put on lush pasture.

The trouble could have been prevented by cutting down a little on the sow's feed for the first few days after putting the sow and litter on pasture.

Accuse pig starters. Pig starters get credit for scouring pigs on pasture when the trouble is not with the pig starter at all. Late last spring and early summer, several farmers in Bureau County, Illinois, decided the pig starter they were feeding was too rich for pigs on Ladino and alfalfa pasture.

After a few days, the looseness disappeared. This was true whether the pigs were treated with high-antibiotic feed, arsenicals, or not treated at all. Again, the looseness in the pigs was due to heavy milk production of the sows on pasture. It is important to remember that sows come to their milk with a bang when put on lush pasture.

Common baby-pig scours. In contrast to serious infectious scours, ordinary looseness due to management mistakes or weather conditions is common in young pigs. Ordinary scours in little pigs is often

[*Turn to page 86*

It's like having a TWO-ENGINE tractor

New SNAP-COUPLER for quick-hitching mounted implements lets you back the tractor from almost any angle. Bell-shaped funnel guides free-swing implement tongue to the single master hitchpoint. Snap! It's coupled. Close lift-arm latches and drive away . . . that's all! Available for all CA and WD tractors now in service.

full 2-plow CA tractor

is priced complete with Power-Shift wheels, Traction Booster, Two-Clutch control, power take-off, helical gear transmission, belt pulley, wide-rim tires with liquid ballast, starter, lights and battery.

SNAP-COUPLER is an Allis-Chalmers trademark.

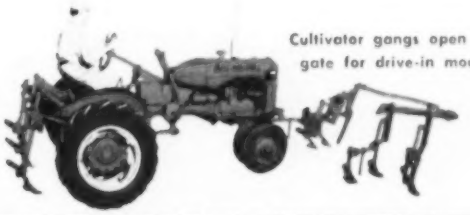
There's *double* usefulness in the two-plow Model CA tractor's powerful engine. A dozen times a day you'll be thankful you have it.

On power take-off work, it's like having *two* engines. With the CA's versatile TWO-CLUTCH system, the convenient hand clutch slows or stops the tractor in heavy crops, releasing *extra* horsepower to the harvesting machine for handling sudden overloads. The foot clutch controls *all* power outlets, assuring utmost safety.

On drawbar work, with two-bottom plows or other mounted implements, the TRACTION BOOSTER automatically increases traction for greater pulling power in tough going.

You'll also enjoy *real* QUICK-CHANGE farming. The CA's rear wheels are shifted by engine power . . . instantly . . . to give you the proper spacing for each job. No time lost getting ready for the field. It's double-quick!

No other two-plow tractor has so many time-saving, labor-saving features. Your Allis-Chalmers dealer is eager to demonstrate the Model CA — just ask him!



Cultivator gangs open like a gate for drive-in mounting.

ALLIS-CHALMERS
TRACTOR DIVISION · MILWAUKEE 1, U. S. A.

Making good products better

New Alcoa® Farm Roofing Sheet is stronger, more corrosion resistant; retains same high heat reflectivity.

Pittsburgh, Pa.—Aluminum Company of America (Alcoa) reports the development of a new aluminum alloy for farm roofs.

After years of research and testing, this new sheet is now ready for farm use.

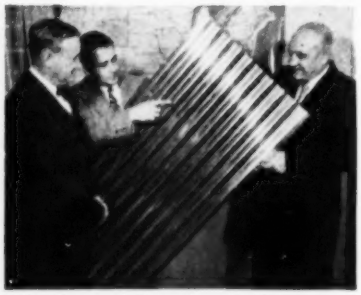
NOW AVAILABLE. Alcoa's distributors and dealers are now stocked with this superior aluminum roofing material. Announcement of the development of this new material was held back until it was immediately available to farmers.

CORROSION RESISTANCE GREATLY IMPROVED. Practical exposure tests in all parts of the United States indicate the new alloy is the most successful ever recommended by Alcoa for farm use.

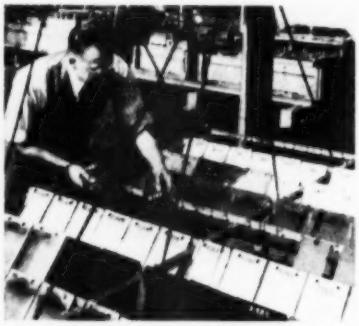
STRENGTH INCREASED. Alcoa technicians report that the new sheet has improved holding power. This means that roofs of the new alloy sheet will have even greater resistance to damage by high winds and hail. As in the past, proper application is stressed for greatest satisfaction.

HEAT REFLECTIVITY RETAINED. Farmers will get the same high heat-insulating value that assures animal comfort and productivity with the new Alcoa Alloy. Laboratory tests show that while strength and corrosion resistance have been raised, heat reflectivity is the same.

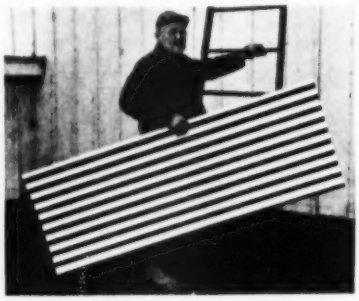
EASE OF APPLICATION. Sheets of the new Alcoa Alloy have the same great advantage of light weight. It will still be possible to put on an Alcoa Aluminum Roof in record time.



Aluminum technical and sales experts show great interest in new Alcoa Farm Roofing Alloy.



Aluminum Research Laboratories have 29 years of testing corrosion resistance of aluminum alloys.



Farmers interviewed showed considerable curiosity about the possibilities of the new alloy. Warren W. Scott of Imperial, Pennsylvania, decided to test the sheet for himself.

ALCOA ALUMINUM

ALUMINUM COMPANY OF AMERICA

Aluminum Company of America
2111-C Alcoa Building, Pittsburgh 19, Pa.

Please send me (free of charge—without obligation) the Alcoa "Farm Roofing Manual".

Name _____

Address _____

City _____ State _____

Pigs have scours?

From page 84

brought on by overfeeding the sow the first week. Sour feed remaining in the mother's trough makes this overfeeding apparent. It is very necessary to regulate the sow's feed properly for a week before and a week after farrowing.

Sudden change of feed, heavy feeding of milk by-products to the sow, damp pens, chilly, cloudy weather, filthy pen conditions, and exposure to drafts and rain also cause scours. If the pigs are over one week of age, just continue normal feeding of both sow and pigs. Reducing the feed to sow and pigs may cut down the milk flow and stunt the pigs.

The worst thing you can do when pigs begin to scour is to drastically reduce the feed for the sows, especially if they are in dry lot. I have run into many cases on farms where the feeder was fearful of scours and drastically reduced the sows' feed. Of course, this reduced the milk supply and the pigs became hungry and stunted from a lack of milk. This often leads to vitamin, protein, and other deficiencies which leave sick and stunted pigs.

Scours from poor feeding. Just as too much sows' milk for very young pigs can cause diarrhea, too little milk or feed may cause scours from deficiencies. In many vitamin-deficiency experiments at Michigan State College over a period of years, the vitamin-deficient pigs had diarrhea. This was especially true for pigs with B-vitamin deficiencies—niacin and pantothenic acid in particular.

The use of antibiotics and arsenicals appears to have lessened the occurrence of this deficiency-type scours. However, an adequate level of vitamins still must be added if pigs are to be assured of a balanced ration with some health insurance.

The biggest cause of deficiency in pigs in this country is underfeeding—semi-starvation—or feeding too little supplement or concentrate. On the average hog farm, the nearer the hogs get to a full feed of a balanced ration, the less trouble there will be from scours and pigs going bad.

Breeding against scours. Breeding is a factor in controlling scours, along with management and feeding. Some breeds and strains have more resistance against conditions which lead to scours.

As a rule, crossbreds have more resistance to disease than purebreds. At both the Michigan and Ohio Experiment Stations, crossbred pigs have remained healthy under the same environmental conditions where purebreds became sick or died from infection. This doesn't mean all purebreds have low resistance. It just means that the hybrid vigor in crossbreds from healthy parent stock have some *added* resistance.

Most any of us can remember the pigs from a certain boar or during a certain season that just didn't seem to do well. Resistance to troubles resulting in scours

is worthy of consideration in selecting breeding stock and in planning the breeding program.

Infectious scours. Last fall at a hog meeting in Macon County, Illinois, the question of scours came up. One young hogman told of losing more than half of his herd a year or so earlier with bloody scours. During the discussion, we asked the group of 35 hogmen present how many of their herds had ever been hit by this type of serious infection. Only two men raised their hands.

Since then I have asked this same question at several hog meetings with similar results. I believe that serious scours due to organisms is not nearly as prevalent as common scours or just "loose" pigs. However, the occasional outbreak of infectious enteritis, transmissible gastroenteritis, swine dysentery, or similar diseases may just about wipe out a herd.

Observations on many farms the past two years show that high levels of antibiotics and arsenicals are effective in overcoming infectious scours. An important thing to remember, however, is that the treatment has to be continued for an extended period of time or the scours will show up again.

How to treat. The companies that sell arsenicals or antibiotics will recommend amounts and give directions for use in feed and water. If an outbreak occurs in young litters before they start to eat or drink water, they can be drenched, using recommended amounts.

Here are 10 good scours-preventing practices:

1. Select for health and hardiness in breeding stock.

2. Feed a balanced ration for each stage of growth or reproduction, with vitamins and antibiotics at insurance levels during critical periods.

3. Carefully regulate the sows' feed and milk flow during the farrowing season (one week before and for one week after farrowing.)

4. Make feed changes gradually and slightly reduce sows' feed when young litters are put on pasture.

5. Furnish comfortable, roomy, well-ventilated quarters—free from drafts.

6. Learn to tell the difference between "normal looseness" on modern high-energy diets and infectious scours. Also learn to recognize common damp-weather scours which are apt to show up in everybody's pigs from time to time.

7. Use a thermometer on several pigs when you suspect trouble. A normal pig's temperature will be from 102 to 103 degrees. If the temperature is 105 to 107 degrees, get veterinary help immediately.

8. Vaccinate for cholera and erysipelas. Keep infectious diseases and parasites out of the herd.

9. Use clean pasture or concrete floors, avoiding dirty wallows and lots.

10. Have a herd health plan. Check up on your list of sanitation practices from time to time to see if you are missing any important health-promoting points. **END**

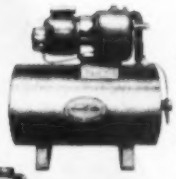
It's the *only* complete water system that needs no tank! The compact Goulds Balanced-Flow Jet gives you features and performance found in no other pump at any price! Open a tap — or two — or three — and your Balanced-Flow Jet instantly adjusts itself to deliver the *exact* flow wanted at each tap — within pump capacity. Quiet, trouble-free, only one moving part, *can't* lose its prime, saves on tank, fittings, installation time, too!

GOULDS
balanced-flow JET

GET A GOULDS FOR QUALITY-DEPENDABILITY-ECONOMY

ONLY GOULDS GIVES YOU THESE OUTSTANDING PUMP VALUES

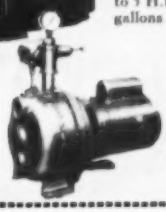
No matter what *your* water requirements for home or farm—any capacity, any pressure, from *any* source—you'll find a Goulds pump just right for you! And, whichever Goulds pump you buy, you may be sure it is the finest of its type—backed by more than *one hundred years* of pump-building experience. For dependability, quality and long-range economy—choose a GOULDS PUMP!



GOULDS TANK-MOUNTED WATER SYSTEMS
Inexpensive jet systems for shallow or deep wells. Low in cost, yet have all Goulds quality features. Easy to install, complete system—nothing else to buy.

GOULDS NEW MULTI-STAGE JET
Designed especially for extra deep wells (up to 200 ft.) where higher pressures are needed. 2- and 3-stage models for single or twin pipe installations. Easy to install—delivers up to 1,175 gallons per hour!

JET-O-MATIC
The famous, all-round farm champion for shallow or deep well service! Sizes from ½ H.P. to 5 H.P.—capacities up to 4,100 gallons per hour.



DEEP WELL JET
A new, low-cost ½ H.P. jet pump for deep wells (up to 130 ft.). Has many outstanding features of the Jet-O-Matic system—for economical single or twin pipe installation.

SEE YOUR GOULDS DEALER

Your nearby Goulds Dealer has the experience—and the pumps—to help you plan a perfect water service for home or farm. See him soon, or, if you don't know his name . . .

MAIL THIS COUPON TODAY

GOULDS PUMPS INC.
Dept. S-34, SENECA FALLS, N.Y.

Please send 20-page illustrated book telling how to select the correct water system. Include name of nearest distributor. Enclosed find 10c to help cover handling and postage.

NAME .....

ADDRESS .....

CONSTIPATED?

"I feel good as ever again!"

says G. C. Dachtler of Hudson, Ohio

"I used to suffer frequently from constipation—sometimes go most of the day before I got any sort of relief.

"That was before I learned about Sal Hepatica's gentle, speedy action. Now when I need a laxative, I take Sal Hepatica, and feel good as ever again!"

Yes, take sparkling Sal Hepatica before breakfast and feel fine again . . . usually within an hour. Or, take it in the evening one-half hour before supper and feel fine again by bedtime! Sweetens sour stomach, too! So keep Sal Hepatica in your medicine chest.

SAL HEPATICA®

ANTACID LAXATIVE

"Most any farmer will tell you"

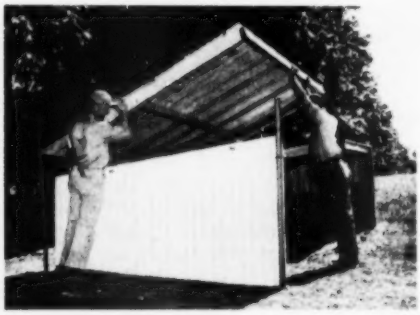
A PRODUCT OF BRISTOL-MYERS

Now is the time to make this

Low-cost hog shelter

Here is cheap housing for your hogs. You can build this shelter in your farm shop now—be ready for spring pigs.

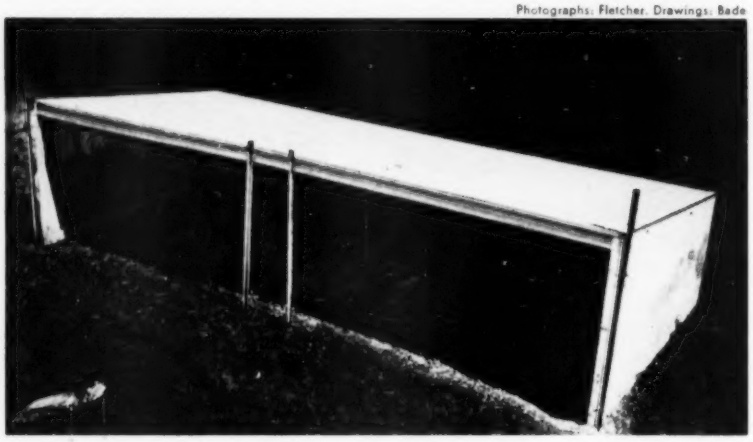
David E. Noller, of Keokuk County, Iowa, who designed it, says materials cost only $54. Noller says he has paid $120 for shelters of the same size.



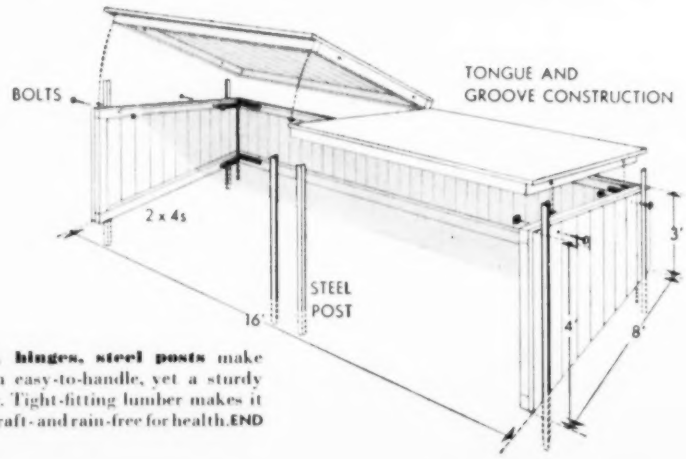
Fifteen minutes is all the time needed to put up or to take down this portable shelter. Here, Noller and his hired man show how easy it's done

Corners are hinged together to save time. Hinges extend into soil 6 inches to make the shelter sturdier

Photographs: Fletcher. Drawings: Bade



Total area in the 16-foot hog shelter is 448 cubic feet. Noller places the shelter so the opening is to the south. He fastens gates across the opening to pen up hogs



Bolts, hinges, steel posts make this an easy-to-handle, yet a sturdy shelter. Tight-fitting lumber makes it both draft- and rain-free for health. END

You get ALL the horsepower your tractor can deliver with Firestone CHAMPIONS

This tire testing unit is measuring the pulling power of the tires in tough plowing. Repeated plowing tests have proven that no other tractor tire can match the Firestone Champion for pulling and cleaning — on any job — in any soil condition.

TRACTOR tires may appear to be the same but it's work done behind the drawbar that makes the difference.

Tests prove that on any job Firestone Champions give you all the horsepower your tractor can deliver — extra drawbar horsepower that saves time and fuel.

Firestone Champions have the proven curved and tapered bar construction that gives a sharper bite and deeper shoulder penetration. Flared tread openings insure positive cleaning in all types of soil and they won't plug at the shoulders. Extra tread plies insure longer life and more retreads by protecting against impact breaks.

Let your Firestone Dealer or Store show you all the Champion features that add up to "more drawbar pull on any job."

Always Buy Tires Built By Firestone, Originator of the First Practical Pneumatic Tractor Tire

Buy Firestone Tires for Every Wheel That Rolls on the Farm

For all around farm truck service, choose the rugged, low-priced Champion Heavy Duty. And for your car, choose the De Luxe Champion — the tire that is safety proved on the speedway for your protection on the highway.

Copyright 1954, The Firestone Tire & Rubber Co.

Enjoy the Voice of Firestone on radio or television every Monday evening over NBC

COMPLETE NOURISHMENT AT A SAVING—IN EASIEST-TO-FEED FORM

Friskies Cubes, fed alone, provide every food element dogs are known to need for complete nourishment. And this modern, sensible feeding method saves you time, money and bother.

MEAT PROTEIN

These crunchy, bite-size morsels which provide wonderful exercise for teeth and gums – are rich in meat protein and contain 19 ingredients. They retain all their vitamins and minerals since they are compressed meal—not baked.

NO FUSS

You feed Friskies Cubes just as they come from the package. There's nothing to add – not even water. No mixing, no hard-to-clean bowls.

SAVE YOU MONEY

Friskies Cubes cost less than half as much to feed as most canned dog food. 2 lbs. of Friskies Cubes contain as much moisture-free food as 6 one-pound cans of most canned dog foods. And you can save uneaten portion for next feeding.

TASTE APPEAL

Years of taste-testing among all sizes and types of dogs have resulted in the "meaty" taste and flavor that dogs love in the famous Friskies formula.

Produced by the makers of
CARNATION MILK
Albers Milling Company
Div. of Carnation Company
Los Angeles 36, Calif.

Friskies

OVER 50 YEARS' EXPERIENCE IN ANIMAL NUTRITION

FOR VARIETY, FEED CANNED FRISKIES, TOO!

It's the "table-quality" dog food with lots of *rich, red meat* — not just ordinary meat, but U.S. Govt. inspected horse meat. Canned Friskies also provides all the food elements known to be needed for complete nourishment.

Hello!
I'm Denise McDonald

YOUR TRAVEL HOSTESS IN ONTARIO

I'm here to help you plan an enjoyable vacation. There are so many wonderful things to do in Ontario. Would you like to "take it easy" for a few weeks at one of our friendly Ontario resorts . . . or tour Ontario's rich farm lands and modern farms—visit noted historic sites and scenic spots! There's good fishing and hunting in Ontario's north woods, and loads of fun for the children.

Drop me a line today and tell me what you'd like to do most, and I'll send you information that will help make your stay in Ontario one you'll long remember.

ONTARIO

CANADA-VACATIONS UNLIMITED

Denise McDonald, 59-X Ontario Travel
Parliament Buildings, Toronto 2, Ontario.
Please send me literature for Ontario Vacations as checked below:

North West ☐ North ☐ South East ☐
South West ☐ Central ☐
Sightseeing ☐ Resort Relaxation ☐ City Visits ☐
Fishing & Hunting ☐

NAME.....
STREET.....
CITY.....STATE.....
PLEASE PRINT

The PLAY

Where playfellows

Woodrow

One lovely morning in spring, Judy waked early. She dressed and ate her breakfast in a hurry so she could go to the barn and see the little lambs born during the night. Her dog Flossie went with her.

Father met her at the door with a little lamb in his arms. "Oh, what a cute little lamb," said Judy.

"Yes, he is very nice," said her father, "but he would not have lasted long if I had not found him. His mother has twins and she doesn't seem to want this little fellow, as she butts him every time he comes near her. Will you take him in to Mother and ask her if she will help us feed him?"

"Sure, Daddy," said Judy.

Mother didn't like to think about feeding the little lamb. She would have to get up at night for a while to feed him. But Judy coaxed so hard and promised to help that Mother finally said, "All right, we will keep him."

Mother and Judy named the little lamb Woodrow. They fixed a box for his bed behind the kitchen stove. This also was where Flossie liked to sleep and she did not like to share it with a little lamb. In a short time Woodrow had outgrown the box and as the nights were now warmer, Mother said he must sleep in the shed.

Just before Judy went to bed each evening she would feed Woodrow and see that he was safe for the night. One evening it was late when she went to feed him and put him in the shed. She called, but he did not come, so she went to tell Mother.

"That's funny," said Mother, "he was here earlier in the evening. I will get the flashlight and we will look for him."

First they went to the barn and looked everywhere but no Woodrow could they find.

"I hope nothing has happened to him," said Judy.

"We will find him, don't worry," said Mother and then added, "Have you seen Flossie?"

HOUSE®

meet every month

"No," said Judy. "Do you suppose Flossie would hurt Woodrow? I will call her. Maybe she can help us find him."

Judy called, but neither Flossie nor Woodrow came.

"Guess we will have to give up looking for tonight," said Mother, "they will be here in the morning, sure. While I'm out here with the flashlight I will shut the chickens up for the night."

Judy tagged along feeling very sad. When they came to the chickenhouse, Mother flashed the light into the building to make sure everything was all right—and there, sleeping just inside the door, were both Flossie and Woodrow curled up together.

"Here they are," said Mother.

Woodrow came running but Flossie acted like she had done something wrong, and came very slowly.

"Oh, I'm glad to see you," said Judy, "why didn't you come when I called?"

"We have told Flossie so much not to hurt Woodrow that I'll bet she thought we would scold her if we found them together," said Mother.

"You can sleep together now if you want to," said Judy. "We will not have to worry about Woodrow any more, for Flossie will take care of him."

And she offered the little lamb the bottle she carried in her hand.

What trees are these?

The missing words are the names of the trees. Maybe some of them are in your own yard.

The sunshine with its tender care
ripens fruit upon our _ _ _ _!
The turtle doves think it a fine
place for a nest in our tall _ _ _ _!
I like to hear bees softly hum
among the flowers of our _ _ _ _!
The largest leaves about our door
are dropped there by our _ _ _ _ _ _ _ _!

Answers: pear, pine, plum, sycamore

What animal friend is this? See if you can figure out which farm animal is spelled out by the hints in this little poem. Each line will give you a clue.

My first is in *kitchen* but never in *house*,
My second is in *bird* but is never in *mouse*,
My third is in *scratch* but is never in *claw*,
My fourth is in *eating* but never in *gnaw*,
My fifth is in *sleeping* and also in *wake*,
My sixth is in *bacon* but never in *steak*,
My whole is a baby with fur soft as silk,
And one of its favorite foods is milk.

Answer: kitten

Your child's future deserves a Wurlitzer *now*

There are many good reasons for getting a Wurlitzer Piano. To beautify your home. To draw your family closer together. To provide countless hours of fun and recreation.

But the best reason of all is to help your youngster get a better start in life. Like a good education, a Wurlitzer Piano is an investment in your child's future. It can help develop self-confidence and poise—traits that can help youngsters become the success you parents want them to be.

A child is young such a little while. So don't put off seeing the many different styles and finishes at your Wurlitzer dealer's *now*. If you're looking for further proof of Wurlitzer value, remember *more* parents buy Wurlitzer Pianos for their children than those of any other name. Make your dreams for your child come true with a Wurlitzer now.

WURLITZER PIANOS

Made by the World's Largest Builder of Pianos and Organs Under One Great Name

Good mixer! If your living room is a combination of styles, here's the Wurlitzer for you. It is deliberately designed to harmonize with period as well as modern furnishings. Available in mahogany or walnut finish. (Model 2500)

THE RUDOLPH WURLITZER COMPANY DE KALB, ILLINOIS

"I remember well the year I put this fence up," says Peter Voorhees of Stronghurst, Ill. "It was back in 1919, just 34 years ago," he proudly recalls. "And just see how good it still is.

"When I built this fence," Mr. Voorhees explains, "I discovered this fact about Red Brand . . . you can always tell Red Brand by the way the wire handles. Even if it wasn't identified with the red top wire, you'd know the difference.

"When you stretch Red Brand fence, you know it's going to stay tight. And you wouldn't want better proof than this fence you see. It is *still* strong and sturdy and doesn't need restretching.

"I've been a booster for Red Brand Fence ever since I built this piece," he explains. "It would pay every farmer who doesn't know how good Red Brand is to use it on his next job."

Naturally, every farmer wants his fence to last a long, long time. That is why Keystone uses copper bearing steel for its wire. Then, for double rust protection, we developed a special process to apply a thick, uniform coat over the wire. Not just ordinary galvanizing. Galvannealing, we call it. This process actually fuses the zinc to the steel. That double protection is why Red Brand does last a long, long time. It will do the same for you.

If you need fence, it will pay to see your Red Brand dealer. Tell him how much Red Brand Fence you need. Also, ask him for those "easy-to-set" Red Top Steel Posts. With this combination, you'll be sure of a fence that will last years longer than ordinary fence.

Want to know how many farmers are cutting costs? Listen to "Red" Brand every Tuesday and Thursday morning on the radio. Or write for free copies of the illustrated booklet—Practical Land Use Broadcaster. It contains many money-making ideas.

KEYSTONE STEEL & WIRE COMPANY
Peoria 7, Illinois
MAKERS OF RED BRAND FENCE • RED TOP STEEL POSTS • GATES
POULTRY NETTING • NON-CLIMBABLE FENCE • BALE TIES

How to stick it out till pasture comes

From page 47

have needed protein, vitamins, and minerals, they will remain healthy and calve normally.

Six to 8 pounds daily of good-quality legume hay will supply needed protein for beef cows. If legume hay is short, ration it to last until you have pasture. Feed 1 to 2 pounds per head daily of 40-percent supplement if no legume hay is fed.

Vitamin A will be provided by green feed—either good-quality green hay or 10 pounds per day of good green silage. If these aren't available, feed a vitamin-A supplement. Mix 1 pound of a 3,000-unit-per-gram vitamin-A concentrate with each 100 pounds of oil meal when 2 pounds of oil meal are fed per head each day. This applies to dairy cows, also.

Provide a mixture of 2 parts bonemeal and 1 part salt. Feed it free-choice. Cull the herd closely.

Dairy cows. Remember, 1 pound of hay daily per 100 pounds body weight is the allowable minimum. Three pounds of silage equals 1 pound of hay if you want to substitute. Feed concentrates according *to* roughage as follows.

1. With good legume hay, feed a concentrate ration containing 12 percent protein at the rate of $\frac{1}{5}$ to $\frac{1}{3}$ pound for every pound of milk produced.

2. With part-legume hay, feed a concentrate ration containing 14 percent protein at the rate of $\frac{1}{5}$ to $\frac{1}{3}$ pound for every pound of milk produced.

3. With unpalatable nonlegume hay, feed a concentrate ration containing from 16 to 18 percent protein at the rate of $\frac{1}{3}$ to $\frac{1}{2}$ pound for every pound of milk produced by the cow.

4. With corn or sorgo silage only, feed a concentrate ration containing 18 to 20 percent protein at the rate of $\frac{1}{5}$ to $\frac{1}{3}$ pound for every pound of milk produced.

Here's a good, inexpensive grain ration for dairy cows:

	Pounds
Ground corn	400
Ground oats	300
Wheat bran	200
Bonemeal	15
Salt	10

The protein supplement you use can be cottonseed meal, linseed oil meal, soybean oil meal, ground soybeans, or a 32-percent commercial supplement. To provide a 14-percent protein ration, add 100 pounds of any one of these supplements to the grain ration mentioned earlier. To make a 16-percent protein feed, add 200 pounds to the grain ration. For a 17- to 18-percent mixture, 300 pounds of any one of these protein supplements should be used.

Most of the poorer-quality roughages don't taste good to cattle. But you can make them eat more by "sugaring" the roughage. Molasses can be sprayed or poured over the roughage. It's easier to handle molasses if you thin it with 1 or 2 parts of water.

Molasses can be substituted for up to $\frac{1}{3}$ of the higher-priced grains. Six and one-half gallons of molasses have about the same feed value as a bushel of yellow corn. If you can buy this amount of molasses for less than one bushel of corn, it will pay you to do it.

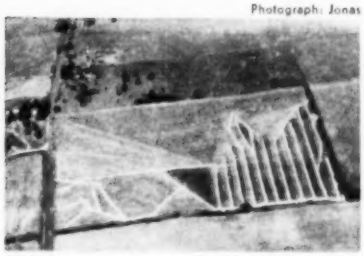
How much molasses can you feed? For feeder cattle, from 2 to 4 pounds daily per 1,000 pounds live weight of the animal is recommended. For dairy cows, feed about 2 pounds per head per day. And for beef cows, from 1 to 2 pounds per head per day can be fed.

The suggestions in this article should help you carry your livestock the rest of the winter. Use the ideas in this article, then follow the suggestions presented in the other article starting on page 47, "How to get spring pasture—quick."

Air record

helps you find tile

Photograph: Jonas



Bird's-eye view of freshly laid tile shows how air photograph keeps record of lines

A freshly covered tile line is as easy to find as an elephant in a schoolyard. But after farming over it a few years, the tile line usually is harder to find than a camoflaged quail.

Not so for several Monroe County, Michigan, farmers. They've discovered how to keep an accurate record of the entire tiling system, including main lines and laterals. They photograph tiled fields from the air right after finishing laying the tile (above).

Years after the tile have been laid, these farmers will be able to glance at their photo-record and tell what's wrong when drainage lags. A look at the photograph will tell them if they need to replace tile or add more lines. A photo-record also may help settle drainage disputes with neighbors, since the original tiling system can be checked for the trouble.

Cost of the pictures for the Michigan farmers was $12 plus cost of materials. You may be able to have your tile lines photographed for less.

Whenever you write us about your *Successful Farming* subscription, enclose an address label clipped from a recent copy. This will help us send you a prompt reply. Address inquiries to Service Division, *Successful Farming*, Des Moines 3, Iowa.

NOW! Easier, lower-cost

FARM CONSTRUCTION

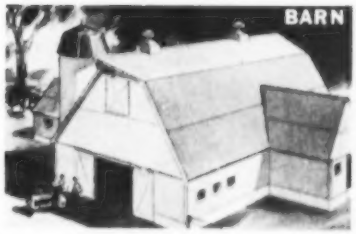
with these Gold Bond Asbestos Products

NEED a tough, weather-resistant grain storage building like the one above...or other farm buildings such as barns, machine sheds, brooder houses? They're easy to build, at low cost, when you use Gold Bond Pliaboard or Permaboard. These rugged, asbestos-cement panels can be nailed right up over any wood framework.

For fast, economical *remodeling*, nail them over old surfaces. It's an easy way to reline an old building for grain storage space. Gold Bond Permaboard and Pliaboard are rot-proof and rat-proof...and fireproof.

For full, illustrated details of easy, low-cost farm construction with Gold Bond Asbestos Products, mail coupon now!

NATIONAL GYPSUM COMPANY
Buffalo 2, New York



Easy-to-apply Gold Bond Corrugated Asbestone ("Economy 250") Siding and Roofing is shown on this barn. Goes over regular wood frame construction.

Gold Bond Chroma-Tex Sidewall Shingles—five fresh colors and white . . . give permanence as well as rich beauty . . . never need paint for preservation.

FIREPROOF Gold Bond ASBESTOS CEMENT PRODUCTS

NATIONAL GYPSUM COMPANY, Dept. SF-34, Buffalo 2, N. Y.

Please send me, absolutely free, your folder, "Gold Bond Asbestos on the farm."

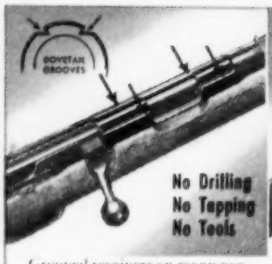
NAME .....

ADDRESS .....

CITY ..... ZONE ..... COUNTY ..... STATE .....

Big News

for "22" shooters



Grooved receivers on many popular Savage and Stevens .22 cal. rifles adapt them for instant use with the new, sensational Weaver Tip-off 'scope mount.

Mount "Tips-on" or "Tips-off" receiver in seconds. 'Scope is aligned for immediate use. The mounting is low, rigid, sturdy.

NOW SAVAGE offers you these "22" rifles ready for INSTANT scope use

SAVAGE and STEVENS AUTO-LOADING RIFLES

These *Three-in-One Rifles* are instantly adjustable as autoloaders, bolt action repeaters or single shots . . . an exclusive Savage "first in the field" feature. Their simple, dependable, rapid firing actions may be quickly disassembled without tools. Choice of either tubular or clip magazine models (as listed below) at popular prices.

Savage Model 6 Tubular Magazine
Stevens Model 87 Tubular Magazine (shown far left)
Stevens Model 85 Clip Magazine

SAVAGE and STEVENS BOLT ACTION REPEATING RIFLES

Savage and Stevens bolt action repeating rifles — choice of either tubular or clip magazine models (listed below) — are recognized among small bore shooters for their fine performance, accuracy and outstanding value.

Savage Model 5 Tubular Magazine (shown at left)
Savage Model 4 Clip Magazine
Stevens Model 86 Tubular Magazine
Stevens Model 84 Clip Magazine

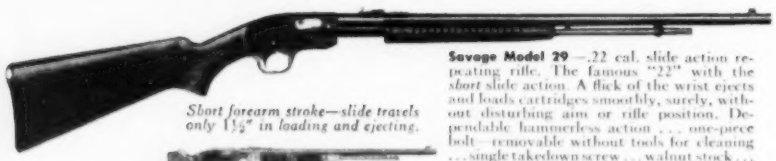
See them at your dealer's.

Write for free catalog of Savage, Stevens and Fox Rifles and Shotguns.

SAVAGE

SAVAGE • STEVENS • FOX *Rifles and Shotguns*

SAVAGE • WORCESTER *Power and Hand Lawn Mowers*



Short forearm stroke—slide travels only 1½" in loading and ejecting.

Savage Model 29 —.22 cal. slide action repeating rifle. The famous "22" with the *short* slide action. A flick of the wrist ejects and loads cartridges smoothly, surely, without disturbing aim or rifle position. Dependable hammerless action . . . one-piece bolt—removable without tools for cleaning . . . single takedown screw . . . walnut stock . . . extra long slide handle, grooved for firm grip . . . accurate sighting equipment.

Loaded NOT Cocked — *Hand Cocked* — *Independent of Bolt*

Stevens Model 15 —.22 cal. single shot, bolt action rifle. Stock correctly proportioned for both grown-ups and youngsters. Hand-cocking action, *independent* of bolt, provides maximum safety. Other features include: Bolt handle directly over trigger for fast operation . . . new stock with handsome black-tipped fore-arm . . . 24" barrel . . . gold bead front sight and open rear sight with elevator.

How to get spring pasture—quick!

From page 47

after they start to ripen, but ryegrass will furnish pasture again next fall.

Here's a tip from W. O. Scott, Illinois agronomist, on sowing oats for pasture. Seed as early as oats can safely be sown in your area. That means to broadcast or drill them even in undisced stalks if the ground is still wet. The broadcast oats will grow even if not disced in. If the ground dries within a few days you can then disc, but this isn't always necessary.

Of course, if the ground is dry, you would work up a seedbed before planting. Treat early-seeded oats with a fungicide, as underground diseases are rough on them then.

Here's a way to lengthen the oats' pasture season—mix in 15 pounds of lespedeza per acre. The lespedeza will be big enough to graze about the time the oats are done. Lespedeza seed is short this year, so get it soon.

A suggestion from Ralph Krenzin, Iowa State College: "If you're seriously in need of some extra hay, it may be wise to set aside a few acres for an oats seeding and not attempt a grass seeding with these oats. In this way the oats can be heavily fertilized, especially with nitrogen, and you'll have no worry about the underseeding. Such an oats crop can go for pasture in the early season or can be used for a hay or silage crop when it reaches the early dough stage.

"After the oats crop is taken off it is usually possible to work land and make a seeding for Sudan grass for July and August pasture. Or if you want to get the piece back into the rotation, you could make a late-summer seeding of bromegrass and alfalfa."

If you need hog pasture: Seed 2 bushels of oats and 3 to 5 pounds of rape per acre in March or April for 4 months of good hog pasture.

Dwarf Essex rape is recommended. It should not be grazed by pigs until 8 inches high, or by mature hogs until 12 to 15 inches high. If grazed before this, hogs pull plants out of the ground.

Pasture specialists who contributed to this "quick-pasture" roundup include R. R. Davis, Ohio Agricultural Experiment Station; W. O. Scott, University of Illinois; Ralph Krenzin, Iowa State College; H. A. Cate, Dixon Springs, Illinois, Experiment Station; O. E. Ackerson, United States Soil Conservation Service.

Through our Farm and Home Service Bureau, *Successful Farming* offers you personal-letter help with your problems without charge. Please outline all details of your question clearly when you write. If referring to an article in the magazine, mention page number and month of issue.

Address your inquiry to Service Bureau, *Successful Farming*, Des Moines 3, Iowa.

New way to cut down feed waste

INSIDE YOUR CATTLE!

Now you can stimulate better digestion of the entire ration you feed to cattle—with quality feeds containing ARCADIAN* Urea Feed Mixture!

Cattle feeding efficiency today centers around the new idea of balanced feeding for the bacteria or "bugs" in each animal's rumen or first stomach. For these bacteria break down and convert the ration into nutrients the cattle can digest for making low-cost meat and milk.

To operate the "fermentation vat" in the rumen at a fast and efficient rate, these bacteria need protein and energy to grow and multiply fast. They grow faster if part of the nitrogen for protein comes in the quickly-available form of ARCADIAN Urea Feed Mixture—and also if some of the energy is in quickly-available form such as the starch of grain or the sugar of molasses.

When you spark rumen activity by balanced feeding of the rumen bacteria for faster growth, they do a better job of breaking down the mass of feed in the rumen. They break down more of the cellulose and other fiber in roughage and grain to make it digestible. This also releases more of the nutrients inside the fibrous cell walls of most feedstuffs.

High-quality cattle supplements, in addition to feeding the rumen bacteria, must also supply other essentials for the cattle. These include calcium, phosphorus, Vitamin A and certain other nutrients, plus additional protein and energy. The rumen fermentation supplies the B-Vitamins. So you can see that the heart of a modern "balanced" cattle supplement is quickly-available energy plus the quickly-available source of protein – ARCADIAN Urea Feed Mixture.

Beef herds on range, dry pasture or protein-poor hay do better when they get a balanced supplement with urea. ARCADIAN Urea Feed Mixture not only feeds the rumen bacteria fast, but is also a highly-concentrated source of protein. This makes room in the concentrate for extra minerals, vitamins and energy to balance the roughage, so you get better growth, better wintering and a more vigorous calf crop.

Feed lot cattle, too, make more efficient gains when their ration includes ARCADIAN Urea Feed Mixture to speed digestion.

Dairy cows need good roughage and high-energy supplements to maintain high milk production and to produce strong calves. You can keep their rumen activity at top level by using as little as 5 to 15 pounds of ARCADIAN Urea Feed Mixture per ton of concentrate as fed. You can get Urea in regular dairy rations or in mixing supplements for use with home-grown grains.

To get these major benefits, look now for high-quality feeds and concentrates containing ARCADIAN Urea Feed Mixture.

Experiment stations and farmers have proved that feeds containing urea give you two major benefits: high-quality supplements, and extra feed value from the entire ration including the roughage. See your feed dealer today for feeds containing ARCADIAN Urea Feed Mixture. Ask him also for free booklets on how it works.

*Trade Mark

Arcadian®

UREA FEED MIXTURE

NITROGEN DIVISION, Allied Chemical & Dye Corporation
P.O. Box 98, Ironton, Ohio. Telephone: Ironton 8-4366

NITROGEN DIVISION ALLIED CHEMICAL

THESE

Certified ALFALFAS

RESIST WILT are WINTER HARDY LEAD in YIELDS

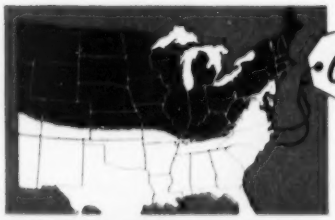
and give you a Dependable Seed Supply

Certified Ranger . . . Certified Buffalo . . . Certified Atlantic—*superior* alfalfas developed by leading state experiment stations and the USDA—now deliver *improved yields and performance* throughout their adapted areas. In the last two years their use has more than doubled. They are now planted on one-fourth of the alfalfa acreage in the U. S.

Here are the reasons . . . important to you . . . for this great popularity

1. **Certified Ranger and Certified Buffalo are *winter-hardy* and *wilt-resistant* in their adapted areas.**
2. **Certified Atlantic has led in more yield trials than all other available varieties in their adapted areas.**
3. **Certified seed of Ranger, Buffalo and Atlantic will give uniform superior performance year after year . . .**

HERE'S WHERE THEY ARE USED and WHAT THEY DO FOR YOU



Certified

RANGER

Recommended by 26 Experiment Stations

Meets the needs of northern farmers for a wilt-resistant winter-hardy variety. As a result—more *farmers plant Certified Ranger than any other variety.* Certified Ranger continues to produce high yields . . . 2½ to 4 tons per acre, per year . . . after wilt susceptible alfalfas have died out.

Certified

BUFFALO

Recommended by 20 Experiment Stations

A hardy wilt-resistant alfalfa in the central growing region. Has the good qualities of Kansas Common (from which it was developed) PLUS *wilt-resistance and added dependability.* Recovers rapidly after cutting. Has same yield advantage as Ranger over wilt susceptible varieties.

Certified

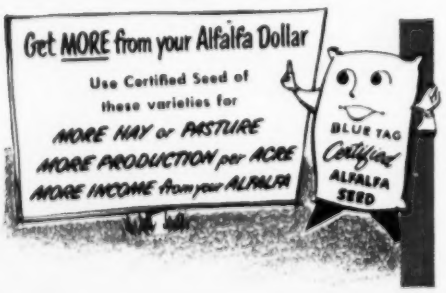
ATLANTIC

Recommended by 17 Experiment Stations

A high-producing variety with good seedling vigor. HAS LED IN MORE YIELD TRIALS THAN ANY OTHER AVAILABLE VARIETY. High yields the first year make Certified Atlantic excellent for short rotations in much of the Corn Belt. Certified Atlantic is winter-hardy in its adapted area.

Watch for these New Varieties as Seed Becomes Available:

Certified Narragansett • Certified Vernal • Certified Williamsburg



SEE YOUR DEALER NOW!

Place your order now for the varieties you want. Then you can be sure your dealer will have your seed at planting time.

For more information see your county agent or farm adviser.

Certified Alfalfa Seed Council

Box 8169, Chicago 80, Illinois

Tips for

Guard cows' health with faster milking

Your cows will have healthier udders if you can milk them out in 4 or 5 minutes. E. J. Perry, extension dairyman at Rutgers University, says the average dairyman milks a cow in about 8 or 9 minutes.

Here are steps to faster milking suggested by Perry:

1. Wipe udder and teats *vigorously* to get the cow to let down milk. Use a clean cloth dipped in disinfectant.

Photograph: Hufnagle

2. Milk two or three streams from each quarter to *open teat canal* and to spot abnormal milk.
3. Attach milking machine *quickly.*
4. *Machine-strip* when the teat cups start to crawl up on the udder.

Machine stripping helps to cut down milking time noticeably, and is easier on the cow. To strip with the machine, pull down on the teat-cup assembly (see picture) while massaging the quarters.

• • • •

Off-flavor in milk can be checked

Anything but the true flavor of milk and milk products hurts the dairyman, says Don Murray, Michigan State College dairyman. Most off-flavors start in the dairy barn, and you can do something about them, says Murray.

Bacteria cause off-flavors. About all you can do about them is be more careful in handling the milk.

Some feeds cause off-flavors, too. If you suspect feeds, take cows off the feeds a few hours before milking. Feed strong-smelling materials such as silage *after* milking.

Poor ventilation forces cows to breathe stale air filled with feed odors that may flavor the milk. To prevent this, ventilation must be improved.

Milk may take on a salty taste, if you

dairymen

have many cows producing milk near the end of their lactation periods. Only one cow in a herd giving salty milk usually doesn't affect the flavor.

• • • •

Cows calving in winter need special attention

A few days before cows freshen, say University of Illinois dairymen, put them in clean, heavily bedded stalls. If weather is very cold, place a blanket over the cow.

Immediately after she freshens, give the cow a bucket of warm water. Clean her udder and teats with warm water to which chlorine has been added. Feed warm bran mash and good hay.

These measures, say the dairy specialists, will help protect the health of both cow and calf.

• • • •

Need more milk per man to continue dairying

Back in the 1940s, 2,000 pounds of the milk produced on the average New York dairy farm each month went to pay one hired man.

In 1954, with the going farm wage at $125 per month plus board, and milk selling at the farm for $4.34 per hundred, 3,000 pounds of milk are needed to pay the wages of one man each month.

Dairy farmers in New York are finding it is necessary for the milk produced per man to be increased in line with the increased cost of his labor. Otherwise, it doesn't pay to have a hired man.

The average annual amount of milk handled per man on commercial dairy farms is now about 80,000 pounds. But on some very successful farms, one man is handling as much as 150,000 pounds of milk per year.

• • • •

Save the best hay for dairy calves

Feed weedy, stemmy, low-quality hay to older livestock—but save the best hay for dairy calves. K. E. Gardner, University of Illinois dairy specialist, says it will even pay you to buy good hay for calves if you have only fair-quality hay.

Calves need the high content of minerals, vitamins, and energy found in the best hay. They eat more of this hay, and grow faster.

Calves won't scour on high-quality hay if they're started on it early. The danger from scours comes when calves are switched from poor to good hay and eat too much good hay at first.

"What! Sell this farm at distress prices to pay taxes?"

"Unfortunately it happens too often! It could happen to you"

Mr. James: I can't believe it! Here I've worked my head off for years making something of this farm so my family would *always* be provided for should anything happen to me! Now you come along and . . .

Bankers Life Man: I'm glad I did before your family has to face a situation like this typical case in our files. Mr. J.E.M. died suddenly, leaving an estate valued at $109,033. But his family needed over $13,000 ready cash to settle it!

Debts	$ 2,901
Administration Expense	3,312
Executor's Fee	1,660
State Inheritance Tax	117
Federal Estate Tax	5,055
Total Costs	$13,045
Cash in Estate	8,403
Additional Cash Needed at Once	$ 4,642

Mr. James: But why *all* that cash to be paid out *at once?*

Bankers Life Man: It's the law, Mr. James. But *you* don't need to worry about it.

Mr. James: Not worry? You know mighty well you can't always sell a farm in a hurry and get a fair price for it.

Bankers Life Man: That's right! But your family won't have to—if you protect yourself now. You can let someone else carry the risk.

Mr. James: Wait a minute! You mean

I can protect myself and my family against this kind of trouble? Can I be *sure* this farm won't have to go at a distress price to settle *my* estate?

THE ANSWER IS YES!

There *is* a Bankers Life Plan—one that every farm owner should know about. A plan that provides protection against such tragic loss. Unless you know exactly what your own situation would be, today isn't a minute too soon to find out. Mail the coupon below. Get the facts. Get the free booklet that shows you how to prevent this from happening to you!

1¾ BILLION DOLLARS INSURANCE IN FORCE . . . POLICYHOLDERS FROM COAST TO COAST

BANKERS *Life* COMPANY

Des Moines, Iowa

Established 1879 • Branch Offices in Principal Cities from New York to Los Angeles

©1954, BANKERS LIFE COMPANY

This FREE booklet tells all about it!

BANKERS LIFE COMPANY, Dept. SF-34
Des Moines 7, Iowa

Please send my FREE copy of your booklet, "How To Avoid The Risk of 'Forced Sale' To Settle Estate Taxes."

Name _____

Birth Date _____

Address _____

Flowing Water doesn't cost...it PAYS!

F & W means Flowing Water by Flint & Walling

Yes, an F & W water pump does pay for itself over and over again! Actually its benefits to your family in convenience, safety, comfort and health far *exceed* the measure of money. Yet, you'll be 'way ahead in dollars, *too*, with the important increases you can get in milk, meat, egg, and garden crop production! Be certain you get F & W, because it's noted for its efficiency and low operating cost. There's practically no upkeep, and thousands of F & W Water Systems are still pumping dependably after years of service. There's an F & W Pump to fit your needs *exactly*. Each is individually tested at the factory for pressure and capacity. You can *rely* on F & W to keep water flowing and profits growing!

FLINT & WALLING MFG. CO., INC.
393 Oak Street • Kendallville, Indiana

F & W Multi-Stage Deep Well Jet

Send for Free Booklet "Flowing Water for Rural Homes"

F&W WATER PUMPS

FARM-USED, FARM-PROVED FOR 88 YEARS

Classified advertisers know their sales always grow when they advertise in Successful Farming.

Udderly Perfect!
For chapped, cracked, touchy teats; massage.

CORONA OINTMENT

Extra-rich in Lanolin. Contains odorless antiseptic. For all minor farm healing jobs.
Trial Size & Mastitis Booklet—Send 10c
¼ lb. $1.10 at Dealers or ppd. THE CORONA MFG. CO., BOX 187 R3, KENTON, O.

Successful Farming serves the farm families in the nation's agricultural Heart. Reach these best farm families in the best farming area with your classified advertisement. Write for details.

SAVE ... MIDDLEMAN'S PROFITS
BUY DIRECT FROM FACTORY!
from MASTER MECHANIC'S BIG 1954 Catalog

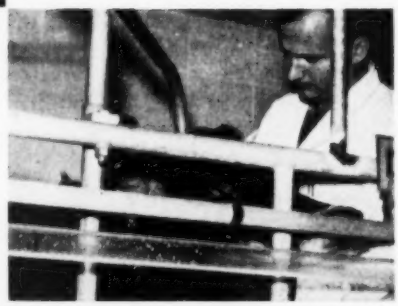
Hundreds of unique, labor saving tools and devices for shop, farm or home. SEND 10c to
MASTER MECHANIC Mfg. Co. Dept. C41 Burlington, Wis.

How to break a heifer to milk

Handle her one month before calving; then, if heifer kicks at the first milking, use force

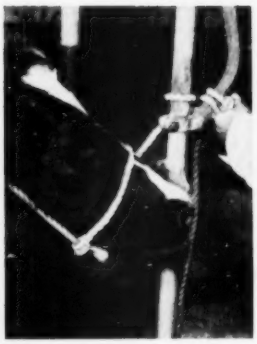
By Richard W. Hufnagle

Gentle treatment. Brushing, currying, and handling bred heifers long before freshening helps get them used to your touch—makes first milking easier



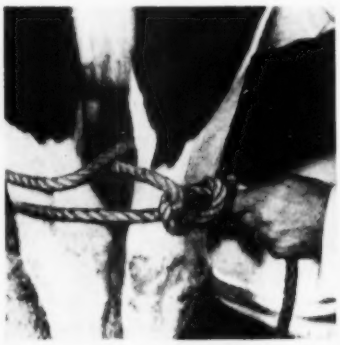
Distract attention. You may have had heifer in milking parlor before, but she needs reassurance during the first milking. Standing at heifer's head, rubbing and scratching will keep her calm

Dry run. Putting heifer through all of the acts of being milked, including washing the udder, helps make her a better milker

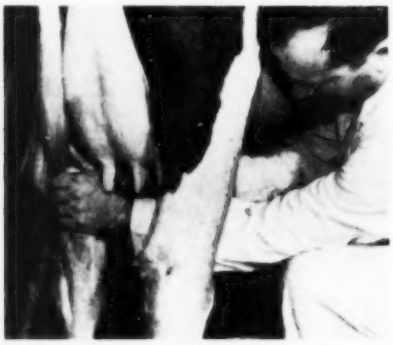


Pull heifer forward. Bring heifer's shoulders up tight against stanchion. This makes kicking impossible. Use slip knot for quick rope release

A noose around belly. Pass a rope around heifer ahead of hips to immobilize back legs. Use slip knot. Leave on heifer short time



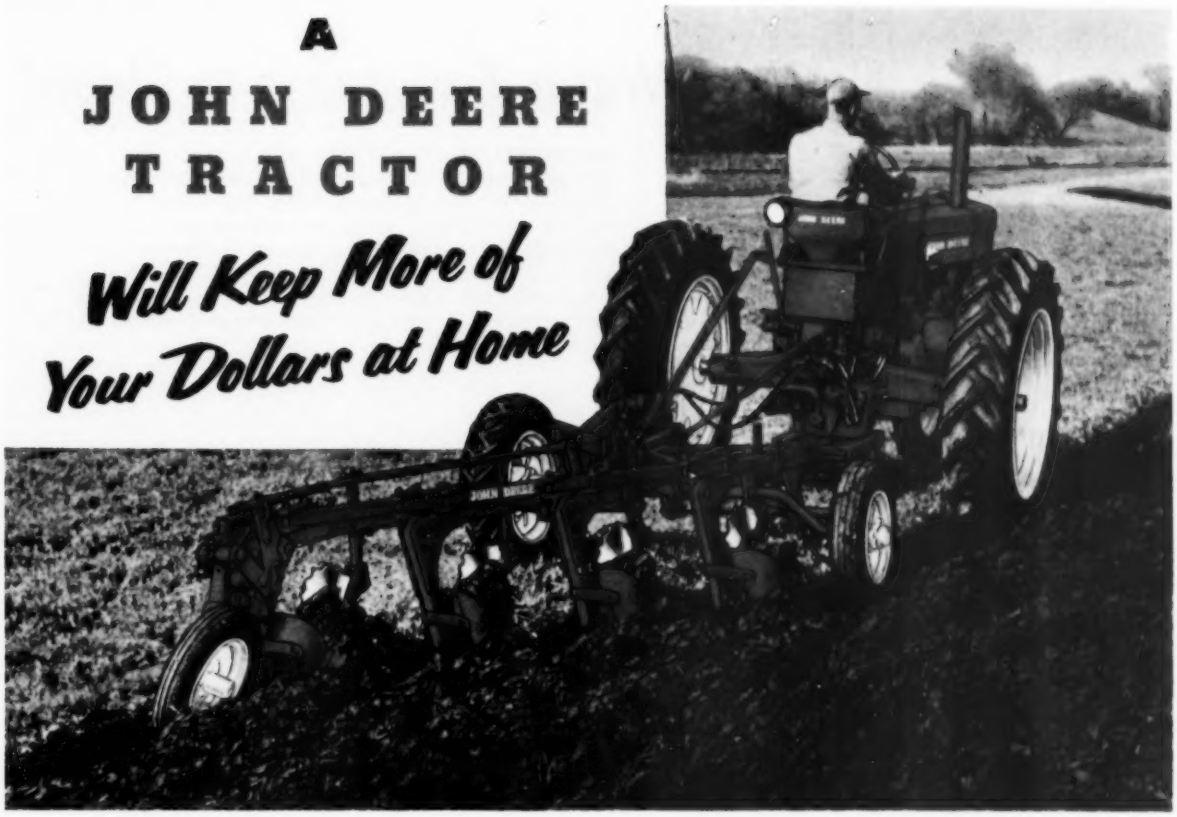
Tie hind legs. For heifers that still want to kick, tie legs together in a figure-eight fashion, using rope with an eye in one end for a quick release



Brace leg with arm. Place your left arm in front of heifer's right leg, then hold onto the tendon above the hock on heifer's left leg. The heifer can't kick over your left arm now

A JOHN DEERE TRACTOR

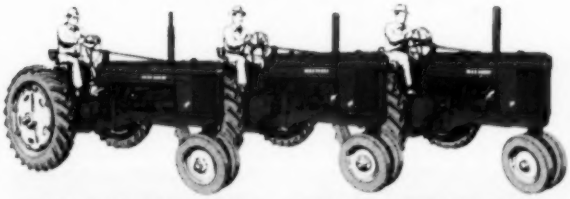
Will Keep More of Your Dollars at Home



There's no doubt about it—you'll keep more of your dollars at home with a John Deere Model "50," "60," or "70" Tractor.

MORE WORK PER DAY. Even the "50"—low-priced youngster of this famous trio—has a tremendous appetite for work. It pulls *3-bottom* plows, *8-foot* disk harrows . . . plants and cultivates *four* rows at a time . . . operates the brand-new *one-row mounted cotton picker* . . . handles a *two-row* mounted corn picker—saves time and labor every step of the way by greatly increasing the amount of work *one* man can do in a day. And you get even greater work output per day with the 3-4 plow Model "60" or the king-size "70."

2-3 Plow Model "50" **3-4 Plow Model "60"** **4-5 Plow Model "70"**



JOHN DEERE

MOLINE JOHN DEERE QUALITY FARM EQUIPMENT ILLINOIS

ON MORE FARM JOBS. New 3-point hitch with your choice of many new tools brings small-tractor utility and convenience to the big-tractor field. "Live" power shaft operates a variety of power-driven machines at top speed and efficiency, and saves the cost of purchasing and maintaining auxiliary engines.

WITH ROCK BOTTOM ECONOMY. Duplex Carburetion Engines with Cyclonic Fuel Intake and All-Weather Manifold operate with utmost efficiency summer and winter. Exclusive design places more of the total tractor weight over the drive wheels to provide increased traction and make every ounce of power, every drop of fuel count more. And John Deere's *two-cylinder* design with its unequalled simplicity and strength of parts insures longer life—lower maintenance costs.

SAVE MORE...START IN '54 —CHOOSE A JOHN DEERE.

SEND FOR FREE LITERATURE.

JOHN DEERE, MOLINE, ILLINOIS **DEPT. H38**

Please send free literature on John Deere "50," "60," and "70" Tractors.

Name _____

R.R. NO. _____ *Box* _____

Town _____ *State* _____

No More Water Fountains to Clean!

NO, NEVER! Merely add a spoonful of new detergent FUNJOL to each poultry watering fountain. When you're ready to change water, just "swish" the old water around . . . toss it out. Fountains are fresh and clean, even without rinsing. Nothing to scrub . . . nothing to scour. New detergent FUNJOL keeps water fountains as sparkling clean as your own table tumblers . . . saves you hours of messy work!

No need to put up with sour, tainted water . . . unpleasant slime in poultry watering fountains. FUNJOL makes drinking water almost as pure and sweet as rain — *and keeps it that way!* That's because new detergent FUNJOL actually dissolves dirt and scum. Yes . . . today's new FUNJOL is a powerful detergent as well as a powerful antiseptic . . . keeps water fountains *clean* as well as *safe!*

New Detergent Funjol Dissolves Dirt and Slime As It Kills Germs!

Laboratory tests prove that FUNJOL actually *kills on contact* even such deadly germs as fowl cholera, pullorum and many strains of fowl typhoid! Don't take chances. Get a bottle of FUNJOL today from your hatchery, feed or poultry supply store. If your dealer doesn't have FUNJOL, send a postcard with his name and address, as well as your own, to THE GLAND-O-LAC COMPANY, OMAHA, NEBRASKA for a free trial bottle.

GLAND-O-LAC

FUNJOL

Keeps Chicks' Drinking Water as Pure and Soft as Rain!

Sew like a professional

Use a tailor's ham

Have you ever had the experience of carefully sewing a beautiful curve into a dress or suit and then seeing it disappear on the flat surface of an ironing board?

Patterns are cut to fit the natural curves of the body—curves that you want in your dress or suit. Without them the garment won't hang right, there's likely to be a pucker in the shoulder or a zig-zag in a skirt seam.

In order to preserve the natural fit of patterns, it would seem logical to use a rounded surface for pressing. Professional tailors have for many years ironed suits to perfection by using a curved surface. Rounded seams pressed over a tailor's ham or cushion keep that flattering fit.

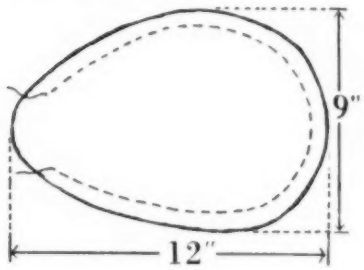
You can easily and inexpensively make a tailor's ham. Just sew it like a pillow. You can use wool scraps or other soft-fabric leftovers for a filler. Make sure it is solid, but not lumpy. Two sizes will enable you to iron almost any type of curve.

Next time you sew a curved seam, don't undo your good job by flattening it on a regular ironing board. Use one of these easy-to-make tailor's cushions under the seam as you press—keep the tailored look!

Small cushion is ideal to hold sleeve top while shrinking fullness with a steam iron

Place hips of skirt over large tailor's ham when pressing skirt's side seam open

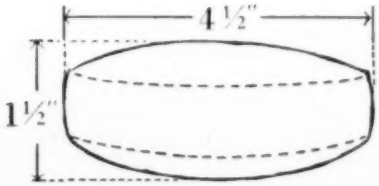
How to make a tailor's ham



Remove all the sizing from heavy, unbleached muslin by soaking in cold water for several hours. Cut an oval-shaped pattern 9" by 12". Press the muslin and cut two pieces to fit pattern.

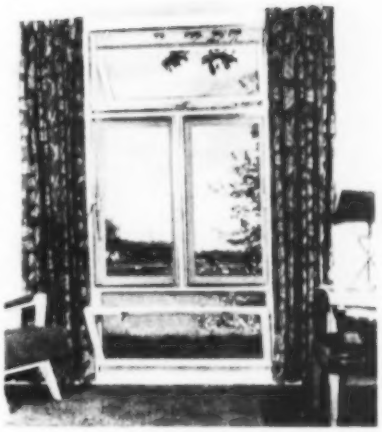
Stitch pieces together ½ inch from the edge, leaving about 6 inches open.

Turn right side out and stuff with wool scraps, sawdust, or kapok. Cushion should be hard enough that it won't dent when you press your fingers against it. Turn in the raw edges at the opening and then whip them together



For a small, round cushion, cut two circles 5½ inches in diameter, and a boxing strip 2½ inches wide and long enough to equal distance around circles, plus 1 inch. Sew boxing-strip ends together.

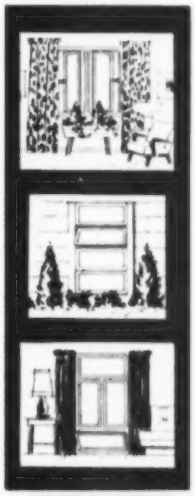
Baste and stitch strip to circles, leaving opening on one side for stuffing. Turn; stuff and whip edges of opening together.



New Window Ideas for your home with the new CURTIS

Silentite Convertible

Now—with one basic wood window unit—you can have casements—popular awning windows—hopper-type sash—ribbon windows—all to fit the lowest building or remodeling budget. The new Curtis Silentite Convertible window is available in units so proportioned that they can be combined to achieve almost unlimited variety. You can choose exactly the right window combinations for any room in your house. And like all Silentite windows—the Curtis Convertible is fully GUARANTEED as to materials and workmanship.



Here the Curtis Convertible is used as a casement. Now you can have beautiful window walls at low cost.

If you like awning windows, the new Silentite Convertible is ideal for this use.

Ventilation at floor level is easy to have by using the Curtis Convertible as a hopper-type window.

Sold through lumber dealers everywhere.

THE CURTIS WOODWORK SILENTITE the "insulated" window

SF-1

Curtis Companies Service Bureau
200 Curtis Building
Clinton, Iowa

Please send information on the Curtis Convertible window and other Silentite window styles.

Name.....

Address.....

City..... *State*.....

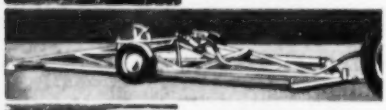
There's GOLD in Land Smoothing

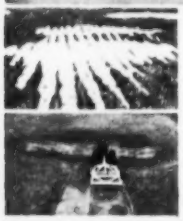
Write for Useful Booklet on the

Eversman All Purpose Tillage Tool and LAND SMOOTHER

EVERSMAN precision smoothed, automatically leveled fields SUBSTANTIALLY INCREASE crop yields, lower production costs. Only EVERSMAN patented crank axle action produces smooth, level fields, free of dead furrows and back furrows with firm, well packed seedbeds. Eversman Levelers reduce labor and water costs on irrigated land... make possible perfect surface drainage on flat fields, rapid field drying, best utilization of moisture by equalized water distribution to all plants.

Six all-purpose (mechanical or hydraulic) models for AUTOMATIC SOIL SMOOTHING, DIRT MOVING, SEED-BED PREPARATION!





Eliminate Pot Holes

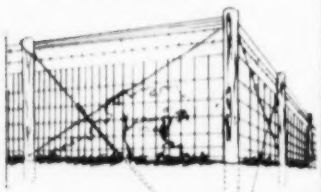
With an Eversman and your own tractor it is easy and inexpensive to eliminate pot holes, fill gullies, straighten out terraces on hillsides, build farm over drainage ditches and grass waterways. Write for useful FREE booklet.

EVERSMAN MFG. CO.

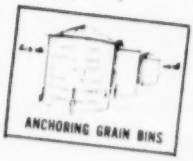
Dept. L-10 • Curtis & Fifth • Denver 4, Colo.

SAVE MONEY ON FENCE CONSTRUCTION and MAINTENANCE!

Use of **Chance Earth Anchors** in erecting and reinforcing fence corners and gateposts, anchoring grain bins, straightening sagging structures, and doing dozens of farm and home jobs will save you money — both on the original construction and on the maintenance.



REINFORCING FENCES



ANCHORING GRAIN BINS

Ask your implement, lumber or hardware dealer about

Chance Earth Anchors

Made by

A. B. CHANCE CO. CENTRALIA, MO.

Makers of earth anchors for the telegraph, telephone and power line companies for over forty years.

Easy brush clearing

Brush clearing doesn't require expensive equipment the way Walter Pomerene, Coshocton, Ohio, does it. A mower, power saw, and homemade rake fill the bill

By Vernon Schneider

Brush is bucked directly ▶ into a fire. High back on rake keeps heat from blistering the tractor. Brush should be dry

Photographs: Munroe

◀ **Homemade brush rake** is loaded on move, brush picked up from 100-yard radius. Teeth are 2" pipes, braced on inside with 1½" pipes

Large brush, small trees ▶ are cut with a power saw, using a 3-hp motor, equipped with a 16" blade.

Low cuts prevent resprouting, also make it possible for a tractor and mower to pass over the stumps.

◀ **Small brush, brambles** are cut with an ordinary tractor mower. Heavy sections in the sickle are used.

Driving at low speed gives the knife several licks at the sprouts, insures a cleaner job of cutting the brush.

NEW DODGE "Job-Rated" TRUCKS

OFFER

A better deal for the man at the wheel

A BETTER DEAL IN CAB COMFORT!

New easy-chair seats, big one-piece windshield, more vision area than any leading make. New cab sealing against dust, drafts. New two-tone interior styling.

A BETTER DEAL IN STEERING EASE!

New steering system gives top maneuverability on or off the road. And Dodge continues to offer shorter turning than any other comparable trucks.

A BETTER DEAL IN LOADING HEIGHTS!

Pick-up floors as low as 23¾ inches from the ground . . . to give greater loading ease. Lower running board for easier entry. Lower hood for added visibility.

A BETTER DEAL IN POWER! In addition to cost-cutting 6's, Dodge now offers the most powerful V-8 engines of all leading trucks; available in 1½-, 2-, and 2½-ton models . . . standard in 2¾-, 3-, 3½-ton. You get the right power for *your* farm job.

A BETTER DEAL FOR YOUR POCKETBOOK—Dependable Dodge trucks are built for economy and long life under the most rugged farm conditions; yet they are priced with the lowest. See your friendly Dodge dealer; you'll find him competent, reliable and interested in giving you the best truck value.

See "Break The Bank" with Bert Parks on TV (ABC, Sundays) • See "Make Room For Daddy" with Danny Thomas on TV (ABC, Tuesdays) • Hear "The Roy Rogers Show" on radio (NBC, Thursdays) • Enter the Dodge 40th Anniversary All-America Contest. See your dealer.

NEW! Even greater value . . . yet still priced with the lowest . . . DODGE "Job-Rated" TRUCKS

Something **new** and **wonderful** for your Kitchen!

Manitowoc
2-zone

10 cubic foot self-defrosting refrigerator

11½ cubic foot 0° to 20° below freezer

Here is truly the last word in kitchen convenience. Generous refrigerator space *on top* where foods are easy to see and reach, *plus* freezer capacity for over 100 meals . . . all in one wonderful appliance!

Even if you already own a freezer, a *2-ZONE* offers added freezer space right in your kitchen, at your finger tips. Separate freezer temperature control lets you quick-freeze with a turn of a dial.

Best of all, a *2-ZONE* needs only 2½ x 3 ft. of floor space . . . and its Frost-Mint color styling adds kitchen beauty, too. Picture it in your kitchen . . . then hurry to see it at your Manitowoc dealer.

MANITOWOC EQUIPMENT WORKS, Dept. S3.
Manitowoc, Wisconsin

Please rush facts on *2-ZONE*.

Name .....

RFD .....

Town ..... State .....

Easy Mushroom Chops

Delicious pork recipes

—*good to the last bite*

By Florence Eng

Whether you select the meat for dinner at the meat counter or from the neat packages in your freezer, pork is always a favorite. But, if you occasionally run out of good ways to serve it, here are some special recipes that will give it new appeal on your dinner table.

Pork should always be cooked to the well-done stage. Broiling is recommended only if the pork has been smoked or cured. Long, slow cooking brings out the finest flavor in the meat and reduces all danger from trichina.

Savory Stuffed Pork Roast

Savory Stuffed Pork Roast

3½ pounds cushion picnic shoulder, boned	¼ cup raisins
1 tablespoon chopped onion	2 cups dry bread cubes
2 tablespoons fat	¾ teaspoon salt
1 cup chopped tart apples	1 tablespoon sugar
	½ cup diced celery

Salt roast cavity. Brown onion in fat and combine with remaining ingredients. Fill cavity with dressing and secure with skewers. Place roast on a rack in a shallow, uncovered pan. Bake at 325° (moderate) about 2½ to 3½ hours or until meat thermometer inserted in center of largest muscle registers 185°.

More recipes on page 106

Special Spareribs Barbecue

Donna Atwood

AMERICA'S NO. 1 "QUEEN OF THE ICE"

Dazzling star of the Ice Capades of '54, "Greatest Show On Ice", says:

"I LIKE CAMELS— YOU WILL, TOO!"

SHE LEAPS...

SHE GLIDES...

SHE DANCES...

SHE SPINS...

SHE SMOKES CAMELS!

AMERICA'S NO. 1 CIGARETTE...

for Mildness, for Flavor...

R. J. Reynolds Tobacco Co., Winston-Salem, N. C.

Camels agree with more people than any other cigarette!

LIKE Donna Atwood – like men and women smokers everywhere – *you* rate the cigarette that rates tops in America for mildness and flavor... *Camels!* Yes, Camels lead all other brands in popularity–*by billions.* You owe it to yourself to try Camels for 30 days ... see how much pure pleasure you've been missing. See how well Camels agree with you!

MAKE THE 30-DAY CAMEL MILDNESS TEST

Only your own 30-day test can tell you best which cigarette is best for you!

More people use

For more than 50 years 3-IN-ONE has been America's most popular household oil. If it works better with oil, it will work best with 3-IN-ONE.

"3-IN-ONE" OIL

Successful Farming's *practical up-to-the-minute information will help you and your family enjoy better farm living.*

New Giant DAHLIAS

NEVER BEFORE OFFERED

2 BULBS for 25¢ POSTPAID

ONE BULB EACH RED CHIEF, LAVENDER BLUE

Grows 12" to 15" flowers on strong, sturdy stems. Separately labelled. Culture included. **Send only 25c for 2, 50c for 4, $1 for 8** and Seed & Nursery Catalog.

R. H. SHUMWAY Seedsman, Dept. 465, Rockford, Illinois

20 Bulbs - Deluxe Mixture GLADIOLUS 25¢

50th anniversary offer

REGULAR VALUE $1.00

Size ¾ to one inch across "Not Bulblets." Guaranteed to bloom this summer. 10 or more varieties in this mixture. **Send 25c in coin for this $1.00 Value,** and we will include Big Bulb, Plant & Seed Catalog

FREE

CONDON BROS. SEEDSMEN Dept. 174 Rockford, ILL.

DRAINS Cellars, Cisterns, Wash Trays; IRRIGATES Your Garden, etc.

ORIGINAL "Type P" Pump has 1,000 year 'round uses: house, garden, farm. Pumps 2400 GPH, 300 GPH 75' high, or 1800 GPH from 25' well. Use any ¼ to ½ HP motor. 1" intake, ¾" outlet. Motor coupling included.

DOES NOT CLOG!

Postpaid if cash with order. (West of Miss. add 20%.) Money Back Guarantee!

Also Gear Pumps in all sizes.

LABAWCO PUMPS $6.95

Belle Mead 33, N. J.

WITH SOFT WATER CLOTHES LAST LONGER

Your clothes will come clean with much less washing. A DIAMOND Water Softener saves money, saves work, saves time! Send for free booklet.

Oshkosh Filter & Softener Co. Oshkosh, Wis.

POWERFUL!

Man, here's *light!* ¼-mile beam — 15,000 candle power. Compact, easy to carry, built to last! Uses two 6 v. batteries. See your dealer.

$6.50 less batteries

DELTA ELECTRIC CO., Marion, Indiana

Delta POWER-KING ELECTRIC LANTERN

Delicious pork recipes

From page 104

Zesty Pork Casserole (Makes 6 servings)

- ½ cup elbow macaroni
- 1 pound ground pork
- 1 cup finely chopped onion
- 1 cup canned tomatoes
- 1 teaspoon salt
- 1 cup American process cheese, grated
- ½ cup soft bread crumbs
- 1 tablespoon melted butter

Cook macaroni in boiling, salted water until tender; drain. Brown pork and onions in heavy skillet. Drain off excess fat. Add macaroni, tomatoes, salt, and cheese. Pour into a 1-quart casserole and cover with crumbs combined with melted butter. Bake at 350° for 45 minutes.

Pasties (Makes 8 pasties)

- ½ cup sliced onion
- 1 tablespoon melted shortening
- 2 cups chopped cooked pork
- 1 cup chopped cooked carrots
- ¼ cup catsup
- ¼ cup light cream
- ½ teaspoon Worcestershire sauce
- 2 cups sifted flour
- 1 teaspoon salt
- ⅔ cup shortening
- 5 to 6 tablespoons cold water

Brown onion in melted fat. Combine with pork, carrots, catsup, cream, and Worcestershire sauce. *Pastry:* Sift together flour and salt. Cut in shortening until mixture resembles small peas. Sprinkle water, a tablespoon at a time, over mixture. Gently mix with a fork until all is moistened. Form into a ball. Roll thin and cut into 6-inch squares. Place about ¼ cup meat mixture on each square, fold in triangles, and pinch edges together. Bake on a cooky sheet at 400° (hot) for 20 to 25 minutes or until well browned.

Spanish Pork Skillet (Serves 6-8)

- 1½ pounds diced pork shoulder
- 1 large onion, sliced
- No. 2 can (2½ cups) cooked tomatoes
- ¼ cup diced green pepper
- ½ cup diced celery
- ¼ teaspoon chili powder
- 1½ teaspoons salt
- ⅛ teaspoon pepper
- 1 teaspoon sugar
- 1 tablespoon flour
- 2 tablespoons water

Brown the pork and onion in a skillet. Add tomatoes, green pepper, celery, chili powder, salt, pepper, and sugar. Cover and cook slowly 1 hour. Mix together flour and water and stir into the mixture. Cook until thickened.

Favorite Pork Liver (Makes 4 to 6 servings)

1 pound pork liver, cut in serving pieces
¼ cup flour
½ teaspoon salt
Dash of pepper
2 tablespoons shortening
¼ cup water
2 tablespoons catsup

Dredge pieces of liver in mixture of flour, salt, and pepper. Brown in shortening. Add water and catsup. Cover tightly and simmer for 30 minutes.

Special Sparerib Barbecue
(Makes 6 servings)

3 pounds loin spareribs, cut in serving pieces
½ teaspoon salt
Dash of pepper
2 tablespoons sugar
1 teaspoon dry mustard
¾ teaspoon salt
Dash of pepper
½ teaspoon paprika
1 cup catsup
½ cup water
⅓ cup vinegar
1 tablespoon Worcestershire sauce
Few drops Tabasco sauce

Sprinkle ribs with salt and pepper. Combine remaining ingredients; bring to a boil. Pour half of sauce over ribs. Cover and bake at 350° (moderate) for one hour. Cover with remaining sauce and bake for another hour.

Easy Mushroom Chops (Makes 6 servings)

6 loin pork chops, ½ inch thick
1 can condensed cream of mushroom soup

Brown chops on both sides. Pour undiluted soup over chops. Cover and bake at 350° (moderate) for 45 minutes. Remove cover last 10 minutes of baking.

Good Barns Grow Old

Good barns grow gently old, as houses do,
Gaining some likeness to the folk they shield,
Earth-colored, scented deep with harvest's yield,
Their doors are nicked by snorting colts that grew
To take the bit, accept the plodding shoe.
Beneath the rafters swallows' nests have sealed
The ancient vents, and skillful spiders wield
Their slow-thrown thread where gadflies flounder through.

How patiently in storms the old barns stand.
In time of drouth they wait the richer years.
Symbols they are of things that will endure;
Their wide roofs shelter much that makes life sure:
The tranquil beasts, the tools, the seeding ears,
The endless promise of the fertile land.

—*Frances Hall*

Pretty housewife Mrs. Dolores Dalzell uses detergents daily — but doesn't take chances with her hands.

"I scrub 1600 sinks a year... but I'm proud of my pretty hands!"

Dolores Dalzell's shining home is proof of the good detergents can do. She uses them to scrub over a thousand sinks a year. (You scrub that many, too!)

While detergents cut through grease, they can rob her hands (and yours) of natural oils, and leave them rough and red.

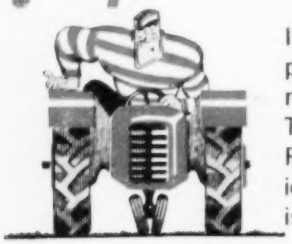
Dolores' solution? Right after detergents — after using any harsh soap or cleanser, she puts on pure, white Jergens Lotion.

It penetrates instantly (instead of just "coating" the skin), with two softening ingredients used by doctors.

You'd never guess how often Dolores uses detergents. Her hands are as soft and pretty as the day she was married! Use the world's most popular hand care — keep your hands safe, too!

Use Jergens Lotion — avoid detergent hands

get your TRACTOR ready now!



If your tractor is using too much oil or losing power, chances are, new tractor piston rings now will save you a great deal of money. Thanks to revolutionary Hastings Chrome Rings, it is now practical and most economical to re-ring before re-boring or re-sleeving is necessary.

re-ring before you re-sleeve

A partial overhaul with Hastings Chrome Rings costs only about one-third as much as a major overhaul. Many repairmen and tractor owners report two replacement installations of Hastings Chrome Rings before re-boring or re-sleeving the cylinders.

get hundreds of extra hours

Over the past seven years, thousands of tractor owners have proved Hastings Chrome Rings give many times longer life than conventional cast iron rings in re-bored, re-sleeved and in badly tapered cylinders. They provide hundreds of extra hours of peak performance and economical operation under every replacement condition.

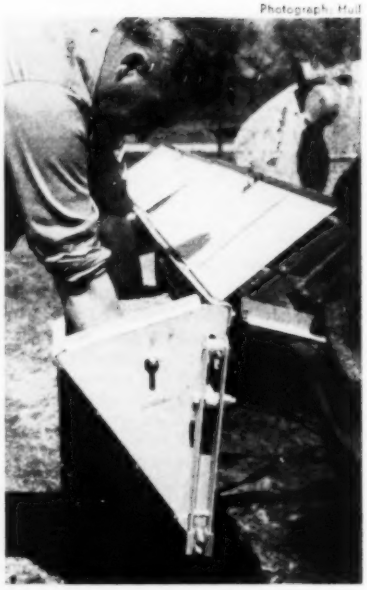
Before your tractor needs a major overhaul, install Hastings Chrome Piston Rings. They stop oil-pumping, check cylinder wear, restore engine performance. It will pay you to replace with Hastings Rings in your car and truck, too.

HASTINGS MANUFACTURING CO., HASTINGS, MICHIGAN • HASTINGS LTD., TORONTO
Piston Rings • Spark Plugs • Oil Filters • Castle • Drout

HASTINGS STEEL-VENT PISTON RINGS

TOUGH on Oil-Pumping
GENTLE on Cylinder Walls

Photograph: Hull



Mixing of seed by hand in triangular hopper is a must before sowing mixed seed

Fast seeder . . .

for grass-legume mixtures

New, single-hopper seeders promise to do a nice, even job of sowing mixed legume and grass seeds.

These seeders are low-cost, driven by power take-off (don't require ground wheels). Last spring they were studied by engineers at the Iowa Experiment Station, and results appear satisfactory. Previously, there had been some doubt that a single hopper seeder would give an even stand of a grass-legume mixture.

Many farmers use endgate seeders for this purpose even though the stands are uneven. To a Cornbelt farmer it doesn't seem worthwhile to buy an expensive grain drill.

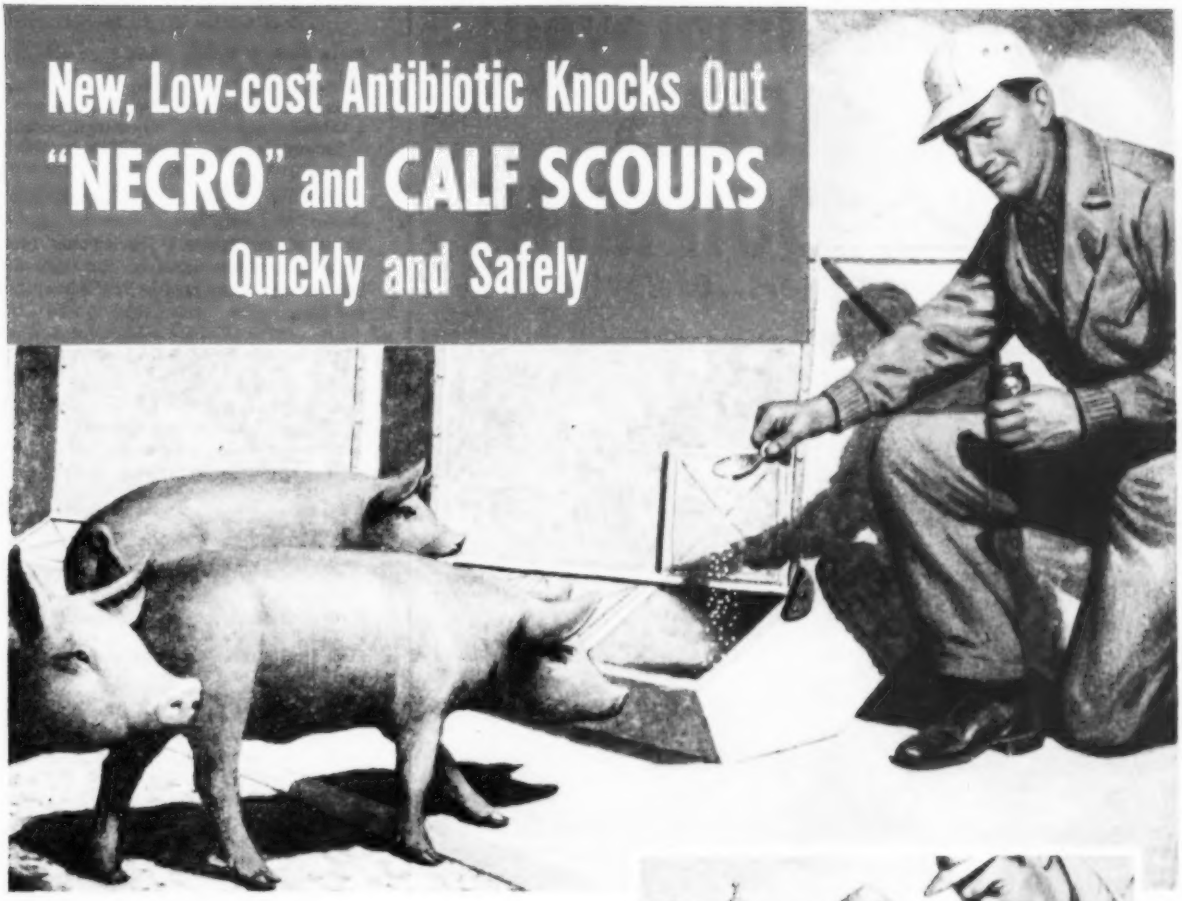
The key to even seeding is the V-shaped hopper (see above). Two reciprocating chains in the bottom of the hopper carry seed through the metering outlets. There's no rotating agitator.

Fine legume, and fluffy bromegrass seed was used in the test. It was mixed in the hopper, then the tractor was driven over extremely rough ground. Metered seed was caught in small pans placed in the path of the tractor. The seed was counted to determine if the ratio of legume to bromegrass was the same as originally placed in the hopper.

It was.

To mix seed, it's probably best to put coarse seed in the hopper bottom, then cover it with fine seed. When mixing it, the volume of seed seems to shrink. That's because the finer seeds dip into the voids between the large seeds.—*Dale Hull, Iowa State College.*

New, Low-cost Antibiotic Knocks Out "NECRO" and CALF SCOURS Quickly and Safely



Now you can control costly "necro" and calf scours quickly and easily.

Give your livestock safe, economical VETSTREP at the first sign of scouring. This new antibiotic product stops "necro" (swine enteritis) and calf scours—often in a single day.

VETSTREP is *easy* to use, too. Just add to water or milk. No fuss, no mess, no expensive equipment needed. You get superior results with VETSTREP because it contains streptomycin which is active in the intestines.

VETSTREP also is superior for *air-sac infection* (CRD) in chickens and *blue comb* in turkeys. This low-cost streptomycin remedy lowers mortality and stunting, gets birds back on feed and maintains weight gains.

Your poultry supply dealer, feed store, or druggist has VETSTREP available in bottles of 15, 75, and 750 grams.

Order a bottle today. *Prompt use can save you hundreds of dollars.*

VETSTREP is the registered trade-mark of Merck & Co., Inc. for its brand of streptomycin sulfate oral veterinary.

VetStrep®

SOLUBLE GRANULES OF STREPTOMYCIN

Research and Production for Better Poultry and Animal Health

MERCK & CO., INC.
Manufacturing Chemists
RAHWAY, NEW JERSEY

© Merck & Co., Inc.

Now! New Improved VEL* CLEANS MILKING EQUIPMENT

Cleaner... Faster... Easier!

HIGH-QUALITY MILK DEMANDS CLEAN EQUIPMENT

Only clean milking equipment will deliver Grade A milk—give you higher profits. New, improved VEL does an excellent cleaning job, no matter how hard the water. New VEL is not a soap—contains no alkali. Vel is a neutral detergent or wetting agent recommended by leading agricultural schools and milk sanitarians.

*VEL is the trade-mark of Colgate-Palmolive Co.

FOR MILKING EQUIPMENT OR DISHWASHING

VEL'S "HAND HEAT TEST" shows how to help avoid ROUGH, RED HANDS!

Dip hands in water. Then put a tablespoonful of any leading washday detergent in one hand—put a tablespoonful of VEL in the other.

Feel the heat

With any leading washday detergent you feel heat, indicating presence of irritating alkalis and harsh chemicals that cause "Detergent Burn"!

Feel NO heat

With Vel you feel no heat because Vel contains NO irritating alkalis or harsh washtub chemicals to cause "Detergent Burn"!

VEL makes dishes shine WITHOUT WASHING OR WIPING!

● **Just soak and *rinse*... If a bit of food clings, a touch of the dishcloth gets it off!**

It's time for supper

From page 55

Easy Baked Beans (Makes 4 to 6 servings)

- ½ cup brown sugar
- 1 tablespoon prepared mustard
- ½ cup catsup
- 1 1-pound 15-ounce can pork and beans
- Salt pork

Combine brown sugar, mustard, and catsup; mix with beans. Pour into individual casseroles or a 1½-quart casserole. Top with small pieces of salt pork or bacon. Bake uncovered at 325° (slow) for 1½ hours.

Meal-in-one Stew (Makes 6 to 8 servings)

- 2 pounds beef chuck, cut in 1½-inch cubes
- 2 tablespoons fat
- 4 cups boiling water
- 1 teaspoon lemon juice
- 1 teaspoon Worcestershire sauce
- 1 clove garlic, minced
- 1 medium onion, sliced
- 2 bay leaves
- 1 tablespoon salt
- ½ teaspoon pepper
- ½ teaspoon paprika
- Dash ground allspice
- 1 teaspoon sugar
- 6 carrots, quartered
- 1 pound small onions
- 4 potatoes, quartered

Brown meat on all sides in fat. Add water, lemon juice, Worcestershire sauce, garlic, onion, bay leaves, and seasonings. Simmer 2 hours, stirring occasionally to keep from sticking. Add carrots, onions, and potatoes. Continue cooking 20 to 30 minutes. Top with *Crescent Biscuits:* Prepare 1 cup biscuit mix as directed on package. Cut into crescent shapes and bake on a cooky sheet at 450° (hot) about 8 minutes.

Chicken Pot Pie (Makes 8 servings)

- 3 medium potatoes, diced
- 6 to 8 small onions
- 1 No. 303 can peas, drained (2 cups)
- 2 tablespoons chopped pimiento
- 3 cups diced cooked chicken
- ¼ cup butter or margarine
- ⅓ cup flour
- 2 cups chicken stock
- 1 teaspoon salt
- ¼ teaspoon pepper

Cook potatoes and onions until nearly tender. Combine with peas, pimiento, and chicken. Melt butter; add flour and blend. Stir in chicken stock gradually and cook until thickened, stirring constantly. Add seasonings and add to vegetable mixture. Pour into 11½x7⅞x2¾-inch baking dish. Top with *Pastry:* Sift together 1½ cups flour and ½ teaspoon salt. Cut in ½ cup shortening until pieces are the size of small peas. Sprinkle 4 to 5 tablespoons water, a tablespoon at a time, over flour mixture, mixing lightly. Gather dough into a ball; roll out on lightly floured surface. Cut strips of pastry 2 inches wide to fit around edges of casserole. Use remaining pastry for chicken cutouts, using a chicken-shaped cooky cutter. Arrange cutouts in center of casserole. Bake at 425° (hot) about 35 minutes or until delicately browned. Serve piping hot. It's a meal in itself.

Hamburger Pie With Lattice Cheese Crust (Makes 4 servings)

- ¾ cup minced onion
- ¾ cup chopped celery
- ¼ cup minced green pepper
- 1 tablespoon butter or margarine
- ¾ pound ground beef
- ½ teaspoon chili powder
- ½ teaspoon salt
- Dash pepper
- ½ teaspoon garlic salt
- 1 can condensed tomato soup

Cook onion, celery, and green pepper in butter until golden, about 5 minutes. Add ground beef and cook until browned. Add chili powder, salt, pepper, garlic salt, and soup. Mix well. Pour into four 8-ounce casseroles. Top with *Lattice Cheese Crust:* Sift together 1 cup flour, 1 teaspoon baking powder, and ½ teaspoon salt. Cut in 2 tablespoons shortening; stir in ¼ cup grated American cheese. Add ⅓ cup milk and mix until dough follows fork around bowl. Roll out ⅛ inch thick and cut in strips ⅜ inch wide. Weave for lattice top. Bake at 425° (hot) for about 15 minutes.

Fiesta Rice (Makes 10 to 12 servings)

- 2 tablespoons fat
- 2 cloves minced garlic
- ⅓ cup chopped onion
- ¼ cup chopped celery
- 2 cups hot water
- 1½ cups rice
- ⅓ cup green-pepper strips
- 1 can condensed beef bouillon
- 1 No. 2 can tomatoes (2½ cups)
- 1 6-ounce can tomato paste (¾ cup)
- 2½ teaspoons salt
- 1 teaspoon sugar
- ½ teaspoon chili powder
- ½ bay leaf
- Few grains cayenne
- 1 pound ground beef

Heat fat in heavy skillet; add garlic, onion, and celery; cook until golden. Add hot water and remaining ingredients except ground beef. Stir well and cover. Simmer 10 minutes. Brown ground beef and stir into rice mixture. Turn into 3-quart casserole, cover, and bake at 350° (moderate) 35 to 40 minutes.

[*Turn to page 112*

SUCCESSFUL FARMING

"There's a leak somewhere! That's my sermon for this Sunday, too!"

Start right—finish LIGHT!

It's CALUMET That Makes 'Em So Flaky-Tender . . .

FAMOUS CALUMET BISCUITS

A Product of General Foods

2 cups sifted flour
2½ teaspoons Calumet Baking Powder
¾ teaspoon salt
4 to 6 tablespoons shortening*
⅔ to ¾ cup milk*

Note: Any time you want biscuits at their best, so flaky-tender and gloriously light they melt in your mouth, bake 'em with CALUMET Baking Powder. For CALUMET is so dependable, it actually *insures* leavening success!

Yes, Double-Acting CALUMET lifts and lightens both in the mixing bowl *and* in the oven's heat. So, whether you're baking biscuits, cakes, muffins, waffles or some other home-baked treat, you can count on CALUMET for the full-power lift that means luscious lightness. No wonder, is it, that twice as many women use CALUMET Baking Powder as any other brand? Ask for CALUMET today.

Method: Sift flour once, measure, then add CALUMET Baking Powder and salt, and sift again. Cut in shortening. Add milk and stir with fork until soft dough is formed (about 20 strokes). Turn out on lightly floured board and knead 20 turns. Pat or roll dough lightly ½ inch thick. Cut with floured 2-inch biscuit cutter. Bake on ungreased baking sheet in hot oven (450°F.) 12 to 15 minutes. Makes 14 biscuits.

*Range in shortening allows for variation in richness of biscuits. Amount of milk varies with the type of flour used. Southern soft wheat flour requires less milk than is needed for regular all-purpose flour.

Add the touch of perfection to any meal. Serve heavenly light CALUMET biscuits piping hot . . . with plenty of golden butter or smooth, rich honey.

DOUBLE-ACTING
Calumet BAKING POWDER

America's Sweetheart

Nestlé's made Toll House® America's favorite cookies. And only Nestlé's® Semi-Sweet Chocolate makes them the authentic old-time way. Richer flavored Nestlé's Morsels always turn out richer, more delicious cookies. And those big, solid morsels stay whole in baking—so every bite is double-good! Easy recipe on every bag. Buy 'em, try 'em—tonight!

Nestlé's Morsels—so good you'll eat them by the handful!

The AUDUBON BIRD-CALL

...an amazing little device that really attracts birds. Twist it . . . a variety of wild songbirds answer! Handmade of pewter and birch, simple to use, it's a perfect outdoor companion for children and grown-ups. Used in Europe for centuries. Ask for it at your favorite book, gift, or garden shop . . . or send $1.50 to

Roger W. Eddy
Newington 5, Conn.

Mailed postpaid with full instructions

If you have a hammer

You'll do a more professional job with Plastic Wood. Fills nail holes, covers hammer marks. Handles like putty, hardens into real wood.

You need "PLASTIC WOOD"®

Stronger — resists weather—sands to a smooth finish.

GET *Fultex* TRIPLE STRENGTH TARP WITH YOUR NAME ON IT!

Turns snow, sleet or rain. Seams triple sewed with rotproof thread. Grommets securely anchored in triple canvas. Your name on your Fultex protects it against loss. Card for ordering name plate packed with Fultex Tarp. Sold by good dealers everywhere.

WRITE for free folder showing correct tarp sizes for trucks, machinery, etc., and how to increase farm profits. Please give name of your dealer.

Fulton BAG & COTTON MILLS, ATLANTA, GEORGIA

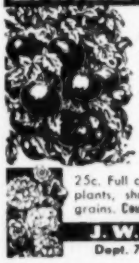
KWIK OUTS END ALL YOUR WINDOW TROUBLES

Stop "outside" washing . . . do away with sash cords and weights . . . eliminate rattle with easy-to-install KWIK OUTS. Raise and lower windows smoothly, easily . . . press, tilt and lift clear to remove. Patented KWIK OUTS fit all sizes of wood sash—install yourself on old or new windows.

Set of four only $1.65 plus postage.
Write for free literature.

RCS TOOL SALES CORP., Joliet Illinois

EARLIEST TOMATO



JUNG'S WAYAHEAD

BIG RED FRUITS AS EARLY AS JULY 4th! Regular price 15c per pkt., but to introduce Jung's Quality Seeds, we will send a trial pkt. of this Tomato, Tender Core Carrot, All Cream Lettuce, Earliest Radishes and a large pkt. of beautiful favorite **SUMMER GLORY FLOWERS** that bloom from early summer 'til late frost. All for 10c, in Canada 25c. Full color catalog of bargains in seeds, plants, shrubs, hybrid corn, certified seed grains. **Coupons for Rare Premiums in each catalog.**

J. W. JUNG SEED CO.
Dept. 74 • Randolph, Wisconsin

It's time for supper

From page 111

Potato-Cheese Bake (Makes 6 servings)

- 3 cups sliced potatoes
- 1 tablespoon flour
- 1 teaspoon salt
- Dash pepper
- ½ teaspoon ground sage
- 1½ cups sliced onion
- ¾ cup grated American cheese
- ¾ cup hot milk
- 5 slices bacon

Place half of potatoes in 10x6x1½-inch baking dish. Sprinkle with half of flour which has been mixed with seasonings. Cover with half of onion. Add remaining flour mixture; add remaining potatoes and onion. Sprinkle with grated cheese. Pour hot milk over. Top with bacon strips and bake at 350° (moderate) for 45 to 50 minutes.

Open Cheese Sandwiches
(Makes 6 servings)

- 2 eggs, well beaten
- 2 cups sharp process cheese, grated
- 1 teaspoon Worcestershire sauce
- ½ teaspoon salt
- ¼ teaspoon paprika
- 6 slices bread
- 6 strips bacon

Combine egg, cheese, Worcestershire sauce, salt, and paprika. Toast bread on one side. Spread cheese mixture on untoasted side. Cut bacon strips in half and top each sandwich with two half strips. Broil about 3 inches from heat, until cheese is puffy and brown and bacon is crisp (about 5 minutes). Serve with canned or homemade tomato soup. Top soup with a mound of sour cream. Sprinkle with chopped chives.

Whole-meal Casserole
(Makes 6 to 8 servings)

- 4 cups thinly sliced potatoes
- 2 cups thinly sliced carrots
- 6 sliced frankfurters
- ½ cup minced onion
- 1 teaspoon salt
- ⅛ teaspoon pepper
- 2¼ cups tomato juice (No. 2 can)
- 1 cup fresh bread crumbs
- ¼ cup melted butter

Place potatoes, carrots, frankfurters, and onion in 2-quart casserole in alternate layers. Combine seasonings with tomato juice and pour over vegetable mixture. Top with buttered crumbs. Cover and bake at 325° (slow) for 1¾ hours. Remove cover from casserole dish and bake ¾ hour longer. **END**

SUCCESSFUL FARMING

"Why don't you ask me what I've been up to before it's too late?"

Whatever your age—feel better by eating better

From page 30

Here are some of the foods you need to build your score up to 100:

3 glasses of milk, any kind 30
(each glass counts 10)
3 ounces of cooked meat 35
(about ¼ pound without waste and before cooking)
2 servings chosen from any of these.. 20
(each serving counts 10)
- 1 egg
- 1 ounce brick or hard cheese
- 2 tablespoons cottage cheese
- 2 ounces luncheon meat
- 1 serving dried beans, baked or boiled
- 3 servings of bread or cereals

plus

2 servings of vegetables 15
This total score 100

Other foods you eat may add a little protein to this score but they won't add much. Extra servings of the foods listed above count, of course.

If you find meat too hard to chew and therefore avoid it, try using ground meat or the chopped or strained canned "baby" meats. Or if you find it necessary to use less meat, then use more eggs and milk and cheese. Just be sure your protein score adds up to 100 every day.

And finally, the calorie problem: We are more likely to overeat when our diet scores low in protein and is poor in other qualities than when our diet is nutritionally adequate. We overeat when we are bored or feel sorry for ourselves—then we especially like the tea-and-toast variety of meals. We feel old, so we comfort ourselves by eating what we think of as "old-folks food."

> **Love seems the swiftest but is the slowest of all growths. No man or woman really knows what perfect love is until they have been married a quarter of a century.**
> —*Mark Twain*

Unneeded and unwanted calories seldom come from eating plain, wholesome food tastily prepared. The foods listed for your protein score total only 1,000 to 1,200 calories. You have several hundred calories left to spend on butter or fortified margarine, on sugar and cream for your tea or coffee, and on fruit and other foods. However, spending 300 or 400 calories on a fancy dessert will probably have to be limited to once or twice a week—the scales will tell you how often you can have these extra calories.

If you are not already supplying your need for milk and for protein foods and if you are not already being reasonable in supplying your calories, you can certainly put more life into your living by doing so—without delay. **END**

★ Easy to put on ★ No offensive odor ★ Can be washed again and again

YOU WON'T BELIEVE that painting can be such worthwhile fun until you try Pittsburgh's amazing WALLHIDE *Rubberized* Satin Finish. Even inexperienced painters find that this wonderful wall paint glides from brush or roller swiftly and smoothly. In less than an hour *Rubberized* WALLHIDE dries to a lovely, velvet-smooth surface—with no objectionable after-odor.

And talk about toughness! *Rubberized* WALLHIDE is practically scuff-proof and shine-proof. Because dirt does not penetrate its non-porous surface, you can scrub off stubborn stains time and time again without harm to its beautiful sheen.

Why not see for yourself how quickly and easily you can give exciting new beauty to faded, tired-looking rooms in your home? Ask your Pittsburgh Paint dealer to show you the attractive, modern 151 colors ranging from delicate pastels to rich deep hues. You can also get these colors in SATIN-HIDE, Pittsburgh's new low-lustre enamel for woodwork and other trim.

Color Ideas Galore... FREE!

● Ask your Pittsburgh Paint dealer for a FREE copy of the new 40-page book, "Color in Action". It explains how you can put color to work to make your home lovelier to live in as well as lovelier to look at. It also contains helpful hints on how to paint efficiently and economically.

PPG PITTSBURGH PAINTS
PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS
PITTSBURGH PLATE GLASS COMPANY
IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

YES! WE GET MORE MILK and SAVE WORK

"We are milking cows out clean in 3 to 3½ minutes with our Globe Milker that took 10 to 12 minutes by hand. Cows are giving more milk and seem to like the Globe milker as well as we do" report the Damen Litseys of Illinois.

Amazing NEW GLOBE 1-2-3-4 Rhythm MILKER

Now in use by thousands of dairy farmers. The best way for sanitary, quick milking. Do away with time-wasting hand milking or getting along with a worn-out, obsolete milker.

Guaranteed BETTER MILKING

"The best hired hand any dairyman ever had, my Improved Globe Milker sure milks fast and also clean. Can get more milk in about half the time required by hand milking" writes Glen Horton of Mich.

"Had an increase of 6 lbs. of milk daily per cow after using the Globe Milker" reports Henry Colburn of Ill.

The GLOBE 1-2-3-4 Rhythm MILKER has proved easier to use . . . easier to clean . . . easier on cows . . . the only milker backed by a $50 warranty of INCREASED PRODUCTION and BETTER MILKING. Unequalled for gentle, 1-2-3-4 Rhythm milking that keeps cows contented and giving down more milk. Not one but hundreds of good dairy farmers report that their Globe Milker has cut milking chores in half. Single and double milking units for any size herd.

We have a very special, low price for farmers who write immediately, giving number of cows milked and whether milking by hand or name of milker now in use.

1/3 OFF

free! World's Greatest MILKER story shows why **GLOBE 1-2-3-4 Rhythm milking** and other big advantages save you more work and time. Send the coupon today. Get low, direct-from-factory price and **EASY TERMS** that let your milker pay for itself while in use.

GLOBE MILKER CO.
Dept. A-1, 200 E. 1st St., Des Moines, Iowa

Please send FREE World's Greatest MILKER story and money saving prices.

Name .....

Post Office .....

RFD ..... State .....

No. of cows milked .....

☐ hand milking ☐ using ..... milker

Livestock news

Leptospirosis hits hogs as well as cattle

Laboratory tests have definitely proved that leptospirosis, a serious disease in cattle, also causes fever, abortion, loss of appetite, jaundice, anemia, and reduced milk flow in swine.

Veterinarians suggest that you isolate all sows that lose their pigs, and burn or bury all infected bedding and feed. Keep infected hogs away from cattle, since they can contract the disease. Humans also can become infected.

Sows that recover from leptospirosis are immune to further attacks, but are carriers. Blood tests will detect infected or exposed animals.

• • • •

Rancid cream in stomach reduces frothy bloat

Michigan State scientists have found that injecting rancid cream into cows' stomachs reduces frothy bloat—the type of bloat often found in cows on pasture.

The rancid cream destroys bubbles containing gas, reducing the bloat and the animal's discomfort. The cream used in the tests was made rancid by treating it with lipase, an enzyme.

At present, this method is too expensive to be used by farmers. But scientists are hoping to find a cheaper product that will do the same job.

• • • •

Automatic feed cart runs like trolley

Hundreds of feet from an electric outlet—yet the feed cart shown below runs on electric power. The answer is in an electric cord strung above the feed bunk to carry power to the motor. It works like a trolley line.

Thomas Russell, DeKalb County, Illinois, built the cart from lumber and spare parts. The cart has a 40-bushel capacity.

The ½-hp motor turns a drive wheel that moves the cart along. A drag chain in the bottom of the cart meters out feed.

• • • •

Brahman-dairy cross gives rapid gains

Brahman bulls crossed with native dairy cows produced fast-gaining slaughter calves in Ohio tests. Calves from native cows crossed with Hereford and Angus bulls didn't do as well as Brahman crosses.

All cross-bred calves were fed a creep ration of equal parts of corn and oats, plus pasture. At the end of 195 days, Brahman-native cross calves averaged 527 pounds. Hereford, Angus-native calves weighed only 483.

• • • •

Don't be oversold on need for vitamins and minerals

Vitamin and mineral supplements for livestock are not substitutes for good pasture and roughage, says F. B. Morrison, livestock feeding expert at Cornell University. Although many low-quality feeds need help, the average feed does a pretty good job of supplying the needed vitamins and minerals.

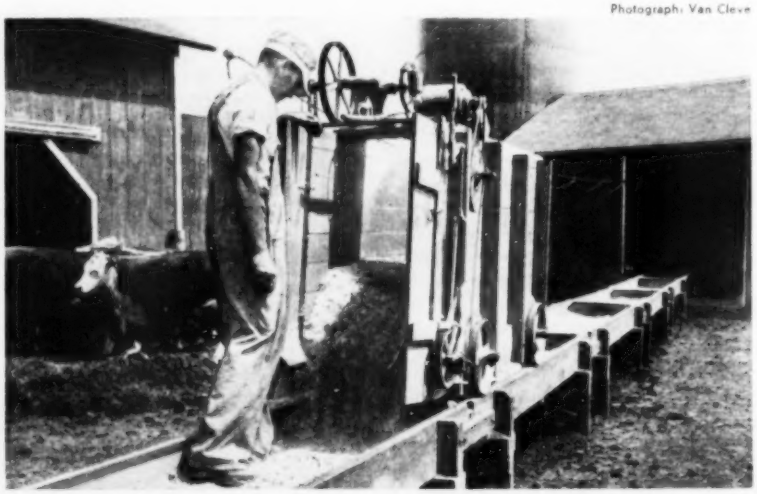
Here are his observations about many claims now being made:

Vitamin A: All livestock, even poultry, get plenty of vitamin A on good pasture and never need a vitamin-A supplement. If dairy cows, beef cattle, sheep, and hogs get good-quality hay, or hay and silage in the winter, they do not need a vitamin-A supplement.

Poultry usually get vitamin A in good-quality alfalfa meal included in mashes.

[*Turn to page 116*

Photograph: Van Cleve



Grass—your best livestock support

Now, more than ever before, America's farmers and ranchers need better grass... and more of it!

Even now the nation's new crop of grass is beginning to grow green on farms and ranches in the deep South. As spring moves north across the country, it pays to be ready to give your grass a lift at the proper time. Plant food can be applied before the frost is out of the land. And spring seeding of grasses and legumes should be done in time to catch the earliest growing weather.

If you plan a grass improvement program this year, here are some tips from men who have made their grass pay in a big way. They point out that *improvement should start on your best grassland.* You'll get greater returns faster, and as your income from grass increases, you'll be able to expand your program to poorer land.

Selection of new seed for pasture or range is very important. There are almost 1,200 varieties of grass grown in the U.S. In every section there are improved and adapted varieties especially suited to certain soils and climates. It pays to check carefully with your Vo-Ag teacher, county agent or state experiment station. They know the grasses and legumes that will do best for you.

Good pasture management begins with the seedbed. It should be finely worked and firmly packed. There must be sufficient moisture to promote quick growth. In renovating established pastures there are three steps that work wonders . . . liming, application of plant foods, and controlling weeds. Results are often amazing. Grass yields are doubled and tripled . . . and on good land, grass can bring in a return equal to the best crop land.

Getting rid of mesquite, sage and other brush is the big problem in range improvement. But chemical killers "rained down" from airplanes are giving results and cutting costs of brush control. When the brush is gone, native grasses grow again. And new varieties can be introduced to increase carrying capacity.

As the raw material of meat, milk and wool, grass is the Number One Crop of livestock production. That's why grass is so important to all of us in the livestock-meat industry . . . why it is so important to give it the care it deserves.

Lots of ways to sell meat and we use the best of them

Sell it soon! Sell it well! Keep on working to sell, sell, sell. That might be a theme song for the Swift salesmen who sell the meat from the livestock you produce. They are trained to be aggressive and to seek broader outlets for meat.

In 1953 you shipped millions of additional head of livestock, especially cattle, to market. Meat packers had to *sell* over two billion pounds of beef more than they sold in 1952. A sizable job, but *every pound was sold.*

Every man on Swift's sales force knows that meat is perishable. It must be sold *soon.* And it must be sold *well* so that our customers will be satisfied and be back for more.

That means Swift must help induce shoppers to buy more meat and to serve it more often. First, we prepare the various kinds of meat for sale so that they reach consumers as fresh, wholesome, quality products. Our salesmen help retailers display the meat attractively. They constantly give them ideas and sales tips; put up posters; arrange product displays in the stores to help sell.

Regular advertising in newspapers and magazines tells people how good meat is and how good it is for them. Recipes for new and better ways of serving meat are developed in Swift's Martha Logan Test Kitchens. Folks hear the story of Swift's quality meats on Don McNeill's famous Breakfast Club. They see meat dishes prepared and served on television shows.

Constant research in Swift's Research Laboratories results in new and better ways of handling meat; and in new products, like specially prepared meats for babies.

In short, Swift's business is finding a wider market for meat and other agricultural products—one of the essential services we perform which benefits all producers of livestock and other agricultural products.

Tom Glaze

Agricultural Research Department

Fertilizing for Beef Rather than Grass

by Dr. J. K. Patterson
Washington State College, Pullman

Experiments on irrigated grass and legume pastures in central Washington show that the fertilizer program that produces the most tons of feed is not necessarily the most profitable in beef production. These pastures received various fertilizers to secure high yields. High yields *were* secured. Forage yields were increased over 50 per cent by use of 120 pounds of nitrogen and 80 pounds of P_2O_5.

But this yield was not satisfactorily distributed over the growing season. Livestock eating it would have had a feast the first 2 months (when about ⅔ of the season's forage was produced) and a famine during the last 3 months. If silage or hay is used to supplement the pasture during the last half, the cost per ton of dry nutrient is double the pasture cost. Thus supplementation, while feasible, is also costly.

A better practice has been the use of nitrogen fertilizer to tailor the pasture production to the needs of the livestock. A light application of nitrogen in early spring followed by summer applications in June and July can give a much more even distribution of forage production. In one experiment, the July, August, and September production was increased 30 per cent by the use of 40 pounds of nitrogen. This tonnage was equivalent, *in value,* to twice that amount produced in the earlier, or feast, portion of the season. Fertilizer has now become a recognized method of tailoring pasture needs to the livestock.

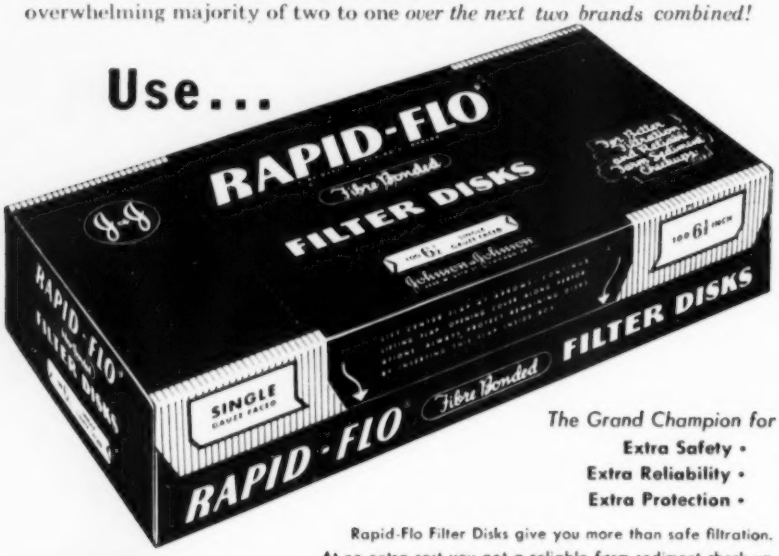
Swift & Company
UNION STOCK YARDS, CHICAGO 9, ILLINOIS

Nutrition is our business

They may LOOK alike
But the Champion has SOMETHING EXTRA

Filter disks, too, may look alike at a glance. But those who depend on milk or cream for cash income know there's a real difference in the safety, reliability and extra protection *engineered* in the Grand Champion Filter Disks. That's why quality milk producers from coast to coast in a national survey chose Rapid-Flo Fibre-Bonded Filter Disks by the overwhelming majority of two to one *over the next two brands combined!*

Use...



The Grand Champion for
Extra Safety •
Extra Reliability •
Extra Protection •

Rapid-Flo Filter Disks give you more than safe filtration. At no extra cost you get a reliable farm sediment check-up . . . extra protection so vital today in quality milk production. All Rapid-Flo Disks are J&J Fibre-Bonded—a size and type to fit your strainer. Your dairy supplier will be glad to provide you with Rapid-Flo—the Grand Champion Filter Disk.

Filter Products Division

Johnson & Johnson
4949 West 65th Street . Chicago 38, Illinois

Livestock news

From page 114

Vitamin D: Under farm conditions, enough vitamin D is supplied cattle and sheep by sun-cured roughages or the sun to assure livestock health. Pigs may need a vitamin-D supplement if they do not receive first-class, field-cured legume hay in winter. Poultry also need a special vitamin-D supplement.

B-complex vitamins: Ruminants (dairy cattle, beef cattle, and sheep) are regular B-complex vitamin factories. When they are fed good rations their needs for the entire family of B-complex vitamins are met, in spite of claims to the contrary.

Vitamin E: Addition of vitamin E is usually not necessary. Most rations of farm animals furnish ample amounts of vitamin E.

Mineral supplements: This is a local problem except for common salt.

Antibiotics: Antibiotics do not seem to be beneficial to mature dairy cows, sheep, or laying hens under practical conditions. However, they have a definite place for growing and fattening pigs and growing poultry and calves, especially if raised on milk substitutes.

• • • •

Full feeding of gilts gives more, bigger pigs

Gilts full-fed all through gestation farrowed 1.2 more pigs, and their pigs were heavier than those of limited-fed gilts, in a Minnesota test.

In the experiment, half of the gilts were full-fed on pasture; the other half limited-fed on pasture. Those full-fed ate 675 pounds more feed during gestation, but weighed 115 pounds more at farrowing.

• • • •

Kill lice in winter, too

Don't let cold weather stop you from ridding those rubbing cattle of lice.

Dr. Leland G. Merrill, Jr., entomologist at Rutgers University, says you can treat them with a 10-percent methoxyclor dust on cold days. A .5-percent rotenone dust will also kill lice in winter.

• • • •

Hormone injections boost beef gains

Injecting the male hormone, testosterone, into beef animals has resulted in faster and cheaper gains at the Oregon experiment station.

Steers receiving the hormone injections gained about 3/10 of a pound more a day than untreated animals. Heifers did even better, gaining over ½ pound a day more than untreated heifers.

Animals that received the hormone shots also required less feed in *total digestible nutrients* to put on 100 pounds of gain. Treated heifers required 393 pounds while untreated heifers ate 507 pounds.

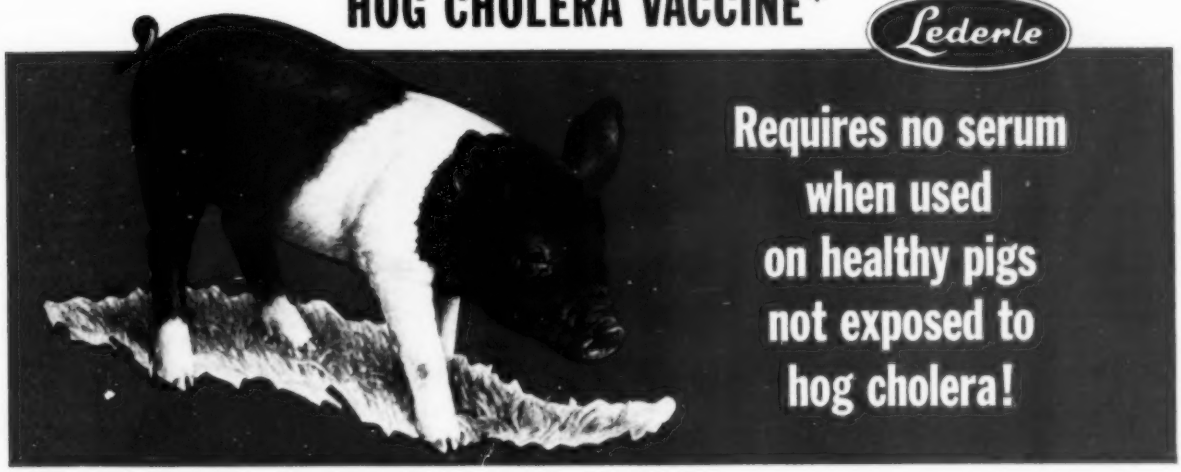
GET TWO-YEAR IMMUNITY AGAINST HOG CHOLERA!

Vaccinate in *less* time, with *less* trouble, at *less* cost, with

ROVAC®

HOG CHOLERA VACCINE*

Lederle



Get all these advantages of ROVAC Hog Cholera Vaccine:

- Active immunity against hog cholera for at least 2 years —7 days following vaccination, although satisfactory protection may occur in 4 days.
- Vaccinate without the use of serum when pigs are healthy and have not been exposed to hog cholera. Save time, trouble and money!
- Use ROVAC simultaneously *with* serum when pigs may be exposed to hog cholera at time of vaccination.
- A truly modified live virus vaccine. ROVAC is *not capable of introducing hog cholera* or any other swine disease.
- ROVAC will not "seed" the soil. It will not cause hog cholera in unvaccinated contact pigs.
- Vaccinate pigs at 6 weeks of age, weaned or not. (Do not vaccinate at weaning time.)

Consult your veterinarian for best management practices and disease-control procedures.

Animal Industry Section
LEDERLE LABORATORIES DIVISION
AMERICAN Cyanamid COMPANY
30 Rockefeller Plaza New York 20, N. Y.

*Full name of product is HOG CHOLERA VACCINE (Modified Live Virus) Rabbit Origin—Vacuum-Dried ROVAC, U. S. Pat. No. 2,518,978

SEARS ROEBUCK AND CO.

Invites you to send for big

FREE Catalog

you'll see GARDEN TRACTORS

Models priced from **$144.00** *to* **$179.00** F.O.B. factory near Chicago *(Prices do not include tires)*

the new ROTO-SPADER

Priced at **$134.95** F.O.B. Chicago. Price varies slightly with locality.

...and all the 20 WORK-SAVING ATTACHMENTS for our tractors

SEND COUPON FOR FREE CATALOG

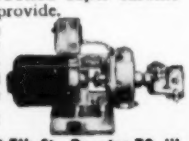
SEARS, ROEBUCK AND CO.
925 S. Homan Ave., Chicago 7, Ill.
Gentlemen: Please send me your FREE Garden Tractor Catalog 532S.
(Please print plainly)
Name_____
Rural Rt.____ Rural Box No.____ P. O. Box No.____
Street Address_____
Post Office_____ State____

Better Get a BURKS WATER SYSTEM

BURKS Pumps More Water Lasts Years Longer

Fresh water and lots of it for milk, eggs and meat—plus city type water service in the home. That's what BURKS super turbine Farm Water Systems provide.

The only systems with Life-Lok. Fully automatic—self priming—finest engineered water systems. Write for FREE Book, "Story of BURKS."



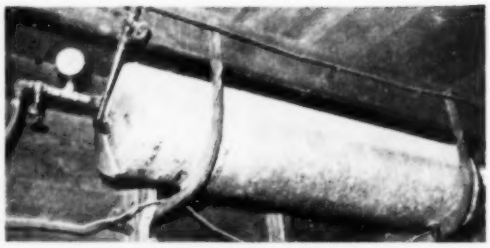
DECATUR PUMP CO., 30 Elk St., Decatur 70, Ill.

Successful shortcuts

Build them yourself, save time and dollars

Compressed air is pumped into an old range boiler in Fred Herman's farm shop, Washington County, Iowa.

A long air hose enables Herman to clean equipment and inflate tires on farm machinery. Boiler is hung from the ceiling, and is fitted with pipe lines, shutoff valves, and a pressure gauge.



Photographs: Wettach

An overhead ramp does ▶ away with a lot of feed handling for Bert Dodds, located in Des Moines County, Iowa. Loose or baled hay is dropped from the ramp, then it's scattered out the length of the feeding rack.

Ramp makes it easy to load trucks for pasture feeding, too. Lot is paved, with feed rack located beside the fence. Mud is no problem.

Riggle

◀ **Welding table** built by Ralph B. Wesley, of Lancaster County, Nebraska, has 3 legs, won't rock even when placed on an uneven surface.

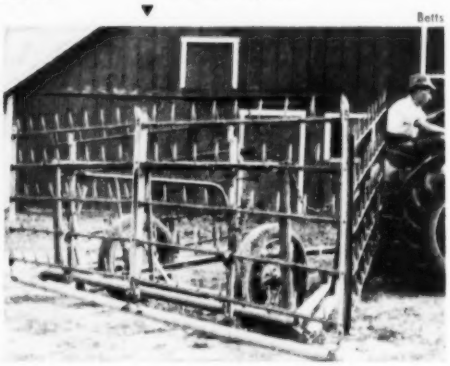
Table was made from an old tank top, and a spreader wheel. Legs are made from 1" pipe, 36" long. Cold-rolled steel, ½"x1", was used as underbracing for the table.

Harrow cart saves a lot of time for Gene Smith, Gladbrook, Iowa. Outer wings of the cart swing forward so harrow can be lifted up and hung on upright frame of the cart.

The rig cost less than $50 to build. Smith used old auto wheels, tires, and scrap iron.

Stratton

▼ Betts



◀ **Grate over gutter cleaner** was installed by Lester Sawyer, Worcester County, Massachusetts. Grate helps prevent foot rot. Cows can't stand in gutter, and won't stand on grate. Also keeps cows cleaner because they don't get liquids on their tails. The grate can be removed quickly

Only STEEL can do so many jobs so well

Salmon-Macaroni Casserole

"Here's a nourishing dish that satisfies even the hungriest member of my family," says Mary Kay of TV's United States Steel Hour. It's featured right now in the canned food section of your favorite store. Try it tonight.

SALMON MACARONI CASSEROLE

4 ounces elbow macaroni
1 can condensed cream of celery soup
⅔ cup evaporated milk
1 1-pound can salmon, drained and broken into pieces
¼ cup finely cut pimiento
1 cup grated American cheese

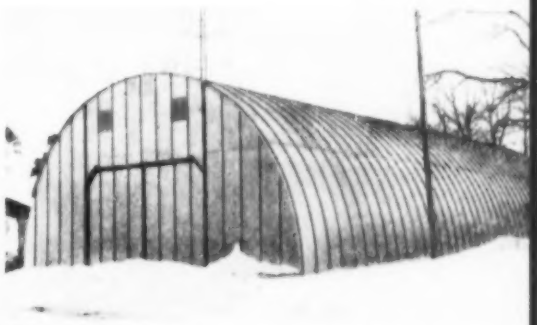
Cook macaroni according to package directions. Drain, but do not rinse; reserve. Combine celery soup and evaporated milk. Add macaroni, salmon, pimiento and ½ cup of the grated cheese. Turn into a greased 1½-quart casserole; sprinkle remaining cheese around edge. Bake in moderate oven, (350°F.) 25 minutes. If desired, garnish with additional pimiento.

YIELD: 4 to 6 servings.

Only 17¢ a serving!

CANNED FOODS ARE YOUR BIGGEST FOOD BARGAIN

"I'm Way Ahead with tight-holding American Fence," says Donald Willette, of Delevan, Minnesota. He raises cattle and hogs as well as crops, and good fence is very important on his farm. So he chooses American Fence. He's been using it for 18 years. And like so many farmers, he's found that U·S·S American Fence is an investment that pays big dividends.



Jack of all trades. That's the beauty of a big, clear-span steel building like this on your farm. You can use it for so many purposes—machine shop, repair shop, grain storage, or as a building for housing livestock and poultry. And when it's built with roof and walls of U·S·S Galvanized Sheets over a U·S·S Structural Steel framework, it's sure to be strong, fire-safe, and very economical.

Product of Steel-Making is fine fertilizer! U·S·S Ammonium Sulphate helped Paul Coder, Howard, Pa., raise corn yield on his farm 65 bushels per acre! Before planting, he plowed under fertilizer, then applied it in the row. When his corn was 8 to 10 inches high, he side dressed with 100 lbs. per acre of Ammonium Sulphate. In 2 years, this program boosted corn yield from 60 to 125 bushels per acre!

SEE the United States Steel Hour. It's a full-hour TV program presented every other week by United States Steel. Consult your local newspapers for time and station.

MANUFACTURED FROM USS STEEL UNITED STATES STEEL

This trade-mark is your guide to quality steel

UNITED STATES STEEL

For further information on any product mentioned in this advertisement, write United States Steel, 525 William Penn Place, Pittsburgh 30, Pa.

AMERICAN BRIDGE . . AMERICAN STEEL & WIRE *and* CYCLONE FENCE . . COLUMBIA-GENEVA STEEL . . CONSOLIDATED WESTERN STEEL . . GERRARD STEEL STRAPPING . . NATIONAL TUBE
OIL WELL SUPPLY . . TENNESSEE COAL & IRON . . UNITED STATES STEEL PRODUCTS . . UNITED STATES STEEL SUPPLY . . *Divisions of* **UNITED STATES STEEL CORPORATION, PITTSBURGH**
UNITED STATES STEEL HOMES, INC. • UNION SUPPLY COMPANY • UNITED STATES STEEL EXPORT COMPANY • UNIVERSAL ATLAS CEMENT COMPANY 4-427-C

there is an
EASIER WAY
to spray!

FREE FOLDER TELLS HOW!

Hanson Brodjet

Learn how you can save time, labor and money with the easier way to spray—the Hanson Brodjet way. No extras to buy! Handles all your spraying jobs with trouble free efficiency. Folder is packed with the vital information you need. **Act now — send coupon today for your free copy! No obligation.**

Hanson Chemical Equipment Co.
334 Charles St., Beloit, Wisconsin

Please send me your free folder about Hanson Brodjet.

NAME _____
ADDRESS _____
CITY _____ STATE _____

CLAY NEW CROP DRYER

INCREASES FEED VALUE* OVER 100%
* Digestible Protein Content

Take guesswork out of haying. Stop rain and sun damage. *Mow hay at peak of protein content.* Dry under controlled conditions. Increase tonnage—save leaves. Conserve all precious feed value. Cut feeding costs. Reduce fire hazard. Modernize. Make farm more productive. Write.

FREE CROP DRYING MANUAL

CLAY EQUIPMENT CORPORATION
344 Reed Street, Cedar Falls, Ia.

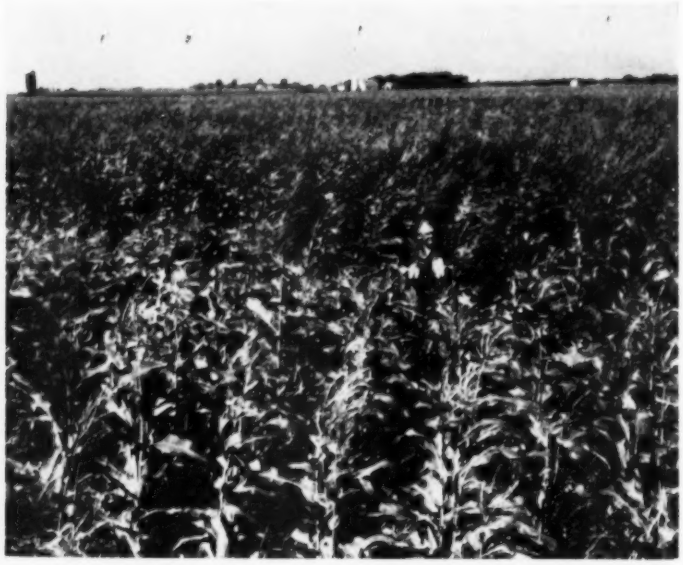
Gentlemen: Please send me literature,
☐ Crop Drying Manual ☐ Barn Cleaners
☐ Comfort Stalls ☐ Mechanical Feeders

I am building _____, remodeling _____

NAME _____
ADDRESS (RFD) _____
CITY _____ STATE _____

8 newest ways to raise corn

From page 53



7. Anhydrous ammonia side-dressed—*simplest yield booster*

You *may not* change your method of plowing or planting, but nitrogen can sure make a difference at picking time. Under most conditions, except where legumes and heavy manure precede corn, side-dressed nitrogen puts a bushel in the crib for every 2 to 3 pounds applied. Newest performer in this field is anhydrous ammonia which is almost always custom applied.

Above is Jack Boote, custom anhydrous applier of Worthington, Minnesota, in a cornfield where he put 82 pounds of nitrogen. Look closely and you can see lighter corn in front of him—where nitrogen stopped. The yields—80.5 bushels and 56.4, or 24 bushels more corn per acre for anhydrous.

8. Heavy fertilization—*1 acre equaled 3*

How much fertilizer can you afford to put on corn? Francis Blaska, Dane County, Wisconsin, thought he was going overboard. He split the field and plowed down half a ton of 10-10-10 on the left. You can read the signs for the rest of his fertilizer treatment—ammonium nitrate was side-dressed at 200 pounds. The half that had only 4-16-16 yielded 33 bushels per acre—the heavily fertilized 103, or 70 bushels more.

The extra fertilizer cost $45 on the 103-bushel side. He'll have almost half of that left next year.

Try one of these ideas this year. Write Successful Farming for more details on methods described in this article.

55 HOGS NETTED ME $1581

OVER FEED COST FED ON MOORMANS!

—says Lyle Egland

"I've never seen pigs take to anything so fast as they do to MoorMan's Mintrate* for Pigs," says Lyle Egland, Houston Co., Minn. "And I've never seen pigs gain so fast as they do on MoorMan's. The pigs in this picture are just 6 weeks old and they're running, on the average, a little better than 35 lbs. each.

"Last Spring I saved 55 pigs from 7 sows. I started them off on MoorMan's Mintrate for Pigs at about 10 days, and at 90 days when I changed over to MoorMan's Mintrate for Hogs they averaged nearly 110 lbs.

"Because I bought all my feed last year I know exactly what this bunch cost me. MoorMan's Mintrate for Pigs and Mintrate for Hogs came to $410.00. 540 bu. of corn at $1.30 came to $702.00, and grinding and mixing was $45.00. And MoorMan's E-Z-Ex* Worm Expeller cost $3.21. They were on alfalfa pasture for about 3 months. Even buying all my corn my total out-of-pocket expense for feed was only $1160.21 —a total cost per pig of $21.10—or $10.34 per hundred pounds of pork.

"I sold the bunch at 5 months when they averaged 204 lbs., and they brought me an average of $49.86 a head—a profit over feed of $28.76 per head—or a total profit over feed of $1581.80 for 55 pigs.

"This Fall these same 7 sows farrowed 61 pigs. I'm sure Mintrate feeding helped in that. Because the Spring pigs went after the Mintrate so fast there wasn't so much drain on the sows' systems and they were in better shape for their Fall pig-building job."

You can make more net profit from your corn—and have a lower out-of-pocket expenditure for feed if you, too, feed the MoorMan way MoorMan's Mintrate for Growing Pigs, and MoorMan's Mintrate for Hogs are concentrated concentrates containing rich proteins, vital vitamins and necessary minerals. Combined with your own good corn they act to release more feed value from that corn and "stretch" its feeding value.

Thousands of hog-feeders will tell you that, supplemented with Mintrates, they can easily produce 100 lbs. of pork with around 5 bushels of corn. Remember—Mintrates give your corn the balance that brings from it more "stick-to-the-ribs" feeding value—help you put your hogs on the market faster—at a greater total profit. Ask your MoorMan Man about the price advantages of contract orders. Or, if a MoorMan Man is not available, write, or wire Moorman Manufacturing Co., Dept. R4-3, Quincy, Ill.

MoorMan's*

(Since 1885)

*Trademark Reg. U. S. Pat. Off.

MAKERS OF VITAMINIZED PROTEIN AND MINERAL CONCENTRATES FARMERS NEED, BUT CANNOT RAISE OR PROCESS ON THE FARM

The neat and well kept Egland home is located on the highest point on the farm. From the front porch, on a clear day, one can easily see parts of three states. Wisconsin, Iowa and Minnesota—a view well worth driving miles to see.

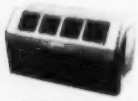
Lyle Egland believes that it's not how big your farm is—it's the way you handle it. Here contouring and strip-cropping of corn and alfalfa has brought him a 1953 corn crop that ran, on the average, 80 bu. to the acre.

HEAT... COOL WITH WINKLER

For warming your home in winter and cooling it in summer, your nearest Winkler dealer has exactly the equipment you need. Before you buy, see the many Winkler features which assure comfort, economy and dependable operation.

OIL AND GAS-FIRED FURNACES AND BOILERS
Alive with features which get full value from your fuel dollar! Furnaces for perimeter or conventional warm air heating . . . cast iron and steel boilers . . . wall furnaces . . . basement and utility room models.

OIL AND GAS BURNERS
For low-cost oil heating, install a Winkler LP low pressure Burner . . . or convert to automatic gas heating with a Winkler Econo-flame Burner.

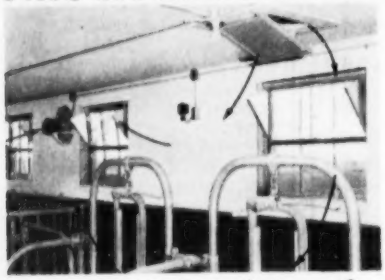


AIR CONDITIONER
Versatile room unit cools, ventilates, heats, dehumidifies, exhausts and filters the air.

GAS AND ELECTRIC WATER HEATERS
Always an ample supply of low-cost hot water for kitchen, laundry and bath.

Send for literature
STEWART-WARNER CORPORATION
U. S. MACHINE DIVISION
Dept. AH-H, Lebanon, Ind.

NEW 'Year-Round' Ventilation PAYS OFF EVERY MONTH



Extremely important to your farm profits is proper ventilation. Your animals are healthier, production goes up and you protect your buildings from rot and deterioration. Now for the first time, flexibility of operation permits correct ventilation regardless of outside temperatures and changes in the number of animals housed or growth of birds such as in broiler houses.

HI-GRI CROP DRYERS

BARN CLEANERS

The new Louden ventilation system makes money for you the "year-round" — provides healthy quarters for livestock and poultry during the cold months and keeps them comfortable during the hot summer months — comfort that means greater weight gains and high production!

HAY TOOLS

FREE to farm operators. Learn how this latest advancement in farm building ventilation operates. Send now for free folder.

DOOR TRACK

The Louden Machinery Co., 23 S. Court, Fairfield, Iowa

LOUDEN

THE GRADE-A LINE OF BARN EQUIPMENT

Laughing at Life

One Explanation of It

A Scotchman visiting the Holy Land came to the Sea of Galilee. Told the price of a sight-seeing boat was $5 an hour, he protested: "Too much. I won't pay it. I could rent a much better boat in Aberdeen for the half of it."

"Ah, but this is Palestine," replied the boatman, "and these are the waters on which Our Lord walked."

Replied the Scot: "With such prices for a boat, nae wonder he walked."

Not So Slow

He: *"So you dress according to your moods. What do you wear when you feel snappy?"*
She: *"A turtle-necked sweater."*

Romantic Angle

Called White Diet Bread, the new loaf is said to have a calorie content as low as any of the dark loves.—Greensburg (Pennsylvania) Review.

A Cynic's View

The hardhearted bachelor is one who realizes a rolling stone gathers no boss.—*Howard Haynes.*

Has It Come to This?

Wanted: Man to butcher. Indianola Locker. Phone 20.—*Indianola (Iowa) Record-Herald.*

The Past Is Present

Sailor: *"And now, Doctor, that I've told you I am going to marry Anne, there's just one thing I want to get off my chest."*
Doctor: *"You just tell me all about it, my boy."*
Sailor: *"It's a tattooed heart with 'Lulu' on it."*

Trying to Cover Up

Joe: "Are you sure Farmer Blink was involved in a shady deal? I can hardly believe it."
Moe: "It's true. With my own eyes I saw him buying that tractor umbrella."

Should Strike Twice Here

Ted: "I heard you were struck in the face by lightning. Tell me about it."
Ned: "Really, it was nothing. Just a flash in the pan."

Reach for the Switch

Many a so-called live wire would be a dead one if it weren't for his connections.

Can't Lose Either Way

Jennie: *"So you're going to marry a twin. How will you tell the difference between him and his brother?"*
Lettie: *"Oh, they're both wonderful fellows and both are rich—so it's really nothing to worry about."*

A Chance Remark

In showing his guests his collection of trophies, the host took down a magnificent jeweled sword from its place on the wall and brandished it about like an expert swordsman.

"Never," he exulted, "will I forget the day I first drew this sword."

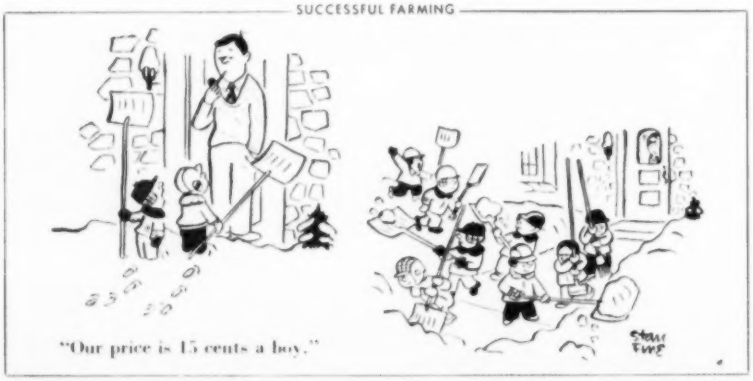
"And where did you draw it?" asked an excited guest.

Replied the host: "At a raffle."

For Better or Worse?

R. T.'s house on Harrison Street is being improved with a large new widow and door in the front of the house.—Cadillac (Michigan) Evening News.

SUCCESSFUL FARMING



"Our price is 15 cents a boy."

WHY IS A MASSEY-HARRIS so different?

TALK with owners of Massey-Harris Tractors and they'll tell you a Massey-Harris is unlike any other tractor they ever owned. The power seems more willing, more eager. Fields seem smaller . . . the day shorter . . . soil less stubborn — and the fuel man seems to stop less often.

Why is this? It's a combination of many things.

One reason is the Massey-Harris power plant with exclusive Cyclo-Head combustion, the more perfect carburetion, the unusual construction of the manifold and the long stroke pistons — all of which result in a more even flow of power, more "mileage" squeezed from every gallon of fuel.

Another reason is the proper distribution of weight for easy steering and plenty of traction when the pull gets heavy. Combined with a comfortable seat, handy controls, and the right kind of vision, the Massey-Harris gives an ease of handling that saves arms and shoulders, that keeps you fresher even after a day in the field.

Still another part of the difference is in Massey-Harris tools that team up with the tractor — tools so designed that they're easy to put on and take off and so engineered as to make good work easy.

But words alone can't tell you all the differences. You have to get up on the seat and actually drive a Massey-Harris. Your Massey-Harris dealer will be glad to arrange a demonstration of the size and model best suited to your farm, your crops and your purpose.

But we warn you, once you drive a Massey-Harris you'll never be happy until you own one. For folder by mail, write The Massey-Harris Company, Inc., Dept. C-110, Racine, Wisconsin.

Make it a Massey-Harris

Parts and Service through more than 2500 authorized dealers

1-2 PLOW PACER

4-5 PLOW 55

2-PLOW COLT

2-PLOW MUSTANG

3-PLOW 33

3-4 PLOW 44

3-4 PLOW 44 SPECIAL

Photographs: Hopkins

Soft suit in orlon-wool flannel is styled to minimize waist. Cut of side-fronts gives hourglass look by widening shoulder-line, whittling waist, ending in shaped pockets. **6324**

Short coat has tuxedo front for straight, narrowing line. With no buttonholes and minimum of fitting, it avoids usual coat tailoring. Shown in pebble wool. **6329**

Half-size patterns cut to slimming fit

For the short, full figure...

By Mary Blaskovich

If regular misses sizes don't shape properly to your dimensions, half-size patterns may be the answer for becoming fit and sewing ease. Designed for the woman 5'5" or under—short waisted, narrow in the shoulders, slightly full hip, waist, and back—the half-size pattern saves cutting and fitting worries. No more raising the waistline, letting hipline slide a bit, narrowing the shoulders—the pattern does all this for you. Besides better fit, there's slimming flattery for the fuller figure cut into half-size pattern styling. Designs satisfy both youthful and older tastes, for half-sizes are a *size*, not an *age*. Pictured are three half-size fashions for spring with sketches detailing the perfect-fitting cut and becoming lines.

More about half-size Advance Patterns, page 126

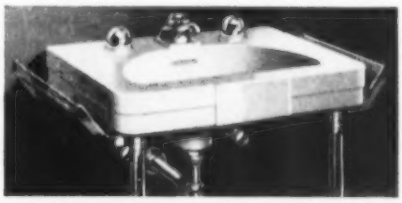
Drawings: Hiser

Pretty tie-silk adapts to graceful half-size dress. Slimming high waistband, soft folds at V neckline, skirt with inverted, unpressed pleats detail the smart lines. **6523**

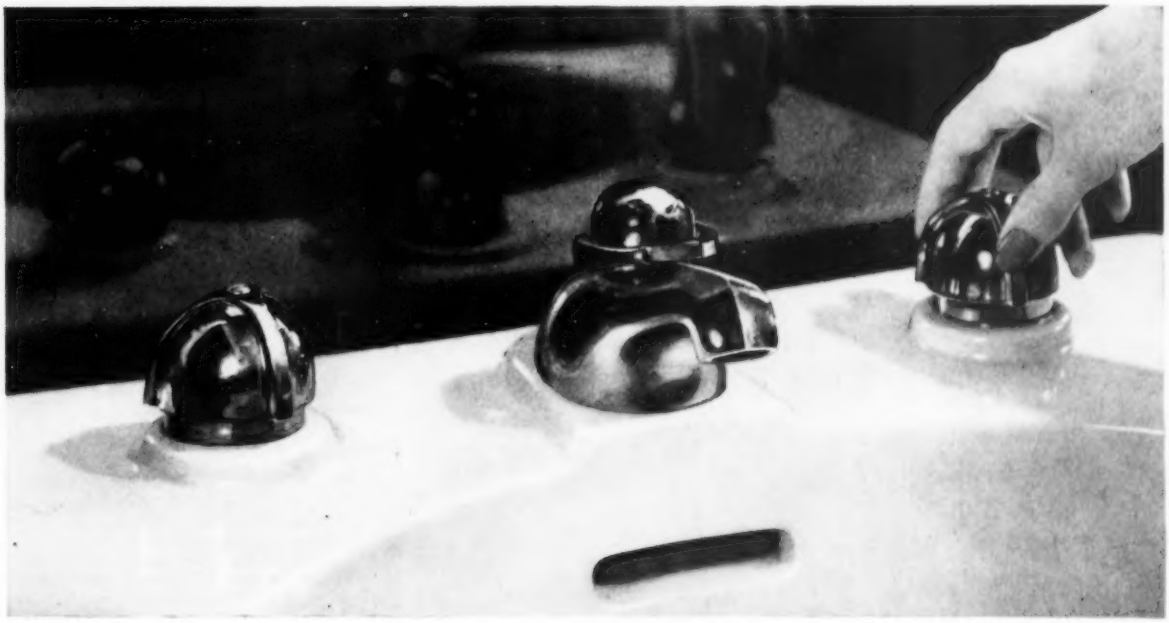
YOU, TOO, CAN AFFORD

CRANE

If you're "family-conferencing" this evening about remodeling, building or buying, it's well to know this: *Crane plumbing costs no more than any other brands you would consider.* On all counts—design, workmanship and long life—Crane is the most preferred. In fact, most people want Crane plumbing in their homes. Hasn't the idea of a Crane bathroom been running through your mind? And why shouldn't you have it, now that you know it costs no more money?



Crane Diana lavatory, one of the many basic Crane models in a wide range of prices . . . all with Crane's precision engineering . . . all with Crane's beauty of design, in your choice of eight decorator colors.



Your bathroom actually tells more about you than the car in your drive

Good taste in things that are not meant for public display is, of course, the surest sign of discrimination.

This is so very true of your bathroom. When guests walk into this most private room of your house and find that it has charm and grace, that it boasts the finest equipment, they can't help but appreciate your good taste. Actually, it's a much more personal thing than being impressed with the car in your drive or the furniture in your living room.

A Crane bathroom in your home speaks volumes for your appreciation of quality. Here is an atmosphere of pure, functional beauty. From the jewelry-like "instrument panel" of the lavatory to the graceful lines of the tub, every fixture and component part reflects the finest craftsmanship in the art of metal working and ceramics.

In building or remodeling you have so many difficult decisions. But it's an easy decision to insist on Crane fixtures for your bathroom. Everyone knows they are the best. You'll be happy with that decision every day for years and years to come.

COME TO **CRANE** FOR IDEAS

Bathroom and kitchen ideas from leading architects . . . fixture ideas from leading designers . . . latest ideas in heating systems . . . ideas on budgets and financing. Your Crane Plumbing and Heating Dealer has them all. See him now and talk it over!

CRANE CO., 836 S. MICHIGAN AVE., CHICAGO

The term "Scotch" and the plaid design are registered trademarks for the more than 300 pressure-sensitive adhesive tapes made in U.S.A. by Minnesota Mining and Mfg. Co., St. Paul 6, Minn. General Export: 122 E. 42nd St., New York 17, N.Y. In Canada: London, Ont., Can. © 3M Co. 1954

For the short, full figure

From page 124

Get out the tape measure and let's make sure half-sizes are cut to fit you. In seconds you can take your bust, waist, hip, and back of neck to waist measurements. Encircle the fullest part of the bust with tape measure. Then draw tape comfortably around the natural waist. Measure around hips, 7 inches below natural waist. Place end of tape at back of neck and measure down to back normal waist. Now check the four measurements you've recorded with the following chart of both half and even sizes for Advance Patterns.

Body measurement chart

Size	Bust	Waist	Hip	Back of neck to waist
12½	32	27	35	15¼
12	30	25	33	16½
14½	34	29	37	15½
14	32	26½	35	16¾
16½	36	31	39	15¾
16	34	28	37	17
18½	38	33	41	16
18	36	30	39	17⅛
20½	40	35	43	16¼
20	38	32	41	17¼

Back views, fabric requirements for patterns on page 124

Half-size suit, 6324. Size 16½ requires 4½ yards of 39-inch fabric, 3¾ yards of 45-inch fabric, 3⅛ yards of 54-inch fabric. For the lining, 2⅛ yards. Sizes 12½-20½. 50 cents

Half-size coat, 6329. In shortie style, size 16½ requires 2⅝ yards of 54-inch fabric, 2¼ yards of 39-inch lining. Sizes 14½ to 20½. Price is 35 cents

Half-size dress, 6523. Size 16½ requires 4¼ yards of 39-inch fabric, 3⅝ yards of 44-inch fabric, 2⅞ yards of 54-inch fabric. Sizes 14½-20½. 35 cents

These Advance Patterns available from local dealers or may be purchased direct from *Successful Farming*, 3003 Meredith Building, Des Moines 3, Iowa.

Do you have a favorite housekeeping short cut? *Successful Farming* pays $5 for each suggestion published. Send your hints to: All Around the House, *Successful Farming*. The unused suggestions cannot be returned.—*Editors*.

eyes tired?

two drops—quick relief

When your eyes seem dull and full of sleep, relief comes in seconds with just two drops of Murine in each eye. Murine cleanses and soothes your eyes as gently as a tear, and the feeling of fatigue seems to float right away. Murine makes your eyes feel good!

MURINE
for your eyes*

*TRADEMARKS REG. U. S. PAT. OFF

IF YOU SUFFER PAIN of HEADACHE NEURALGIA NEURITIS

get **FAST RELIEF** with

the way thousands of physicians and dentists recommend.

HERE'S WHY . . . Anacin is like a doctor's prescription. That is, Anacin contains not just one but a combination of medically proved active ingredients. No other product gives faster, longer-lasting relief from pain of headache, neuralgia, neuritis than Anacin tablets. Buy Anacin® today!

FALSE TEETH
That Loosen Need Not Embarrass

Many wearers of false teeth have suffered real embarrassment because their plate dropped, slipped or wobbled at just the wrong time. Do not live in fear of this happening to you. Just sprinkle a little FASTEETH, the **alkaline** (non-acid) powder, on your plates. Holds false teeth more firmly, so they feel more comfortable. Does not sour. Checks "plate odor" (denture breath). Get FASTEETH at any drug counter.

CORNS GO FAST!

Enjoy quick relief and speedily remove aching corns with soothing, cushioning, protective, world-famous Dr. Scholl's Zino-pads!

Dr. Scholl's Zino-pads

Home pasteurizer

From page 35

Water is circulated continuously during cooling with this pasteurizer. The rubber hose connection fits any size of faucet

No bottles needed with this pasteurizer. The pouring neck allows the milk to be used right from the sanitary container. The milk container fits in water during pasteurization, then is cooled by running water over the sealed container at the sink

Storage problem? Not for Mrs. Charles McLarney, Clinton County, Missouri. She has a pull-out shelf built under kitchen sink. Connected to water and electricity, pasteurizer is easy to use—no lifting! END

SEPTIC TANK OWNERS *Read this!*

You may have been cautioned against using any kind of chemical to clean toilet bowls connected with septic tanks. *This does not apply to Sani-Flush.*

Write to us for free copy of "Report of Scientific Tests". These tests were made by a noted firm of sanitary engineers. They prove beyond question that Sani-Flush is perfectly safe. It cannot harm any septic tank system.

If you are one of those who have been missing the benefit of Sani-Flush in cleaning toilet bowls without drudgery, you can begin using it at once. It not only cleans away the film that gathers in all toilet bowls but disinfects as well. Just follow the simple directions on the can.

Write today for your free copy of report. Address The Hygienic Products Company, Dept. A-3, Canton 2, Ohio.

Sani-Flush

PERFUMED with a mild, fresh fragrance

"No use hanging around, Gwendolyn, BURLAP feed sacks won't burst when wet!"

FREE. *Get cash for used burlap bags or make beautiful, useful burlap handicraft articles. Write for booklets.*

THE BURLAP COUNCIL
of the Indian Jute Mills Association
155 E. 44th St., New York 17, N. Y.

GIANTS OF CALIFORNIA

Petunia

"The Handsomest Frilled Petunia in the World." Large, rich colored blooms in every conceivable shade on stately plants. Send 10 cents in coin for Regular 50c Packet (150 Seeds) and Big Seed & Nursery Catalog. **FREE**

CONDON BROS. SEEDSMEN Dept. 175 Rockford, Illinois

Even in dry weather Spencer "Mr. N" Ammonium Nitrate paid off.

Tests prove how

Nitrogen can help your corn beat drouth

Every farmer knows how ammonium nitrate fertilizer pays off on corn in a normal year. But what happens when there is little or no rain? Agronomist Ray Nicholson of Iowa State College checked yields in drouth areas, and found corn that got adequate nitrogen put down roots more than four feet deep. These roots took almost every bit of the moisture out of the soil, and left it dry as deep as five feet down.

Corn that got no nitrogen, however, went down only two-and-one-half to three feet. In short, the nitrogen-treated corn reached down and took advantage of 3.5 inches of moisture (per acre) that was completely unavailable to the corn which had no nitrogen.

This made a big difference in yields. Corn that got no nitrogen made only 19 bushels per acre; corn that got 120 pounds of nitrogen made 64 bushels per acre! Results like these show again why Spencer "Mr. N" Ammonium Nitrate is a mighty sound investment no matter what kind of weather we get in 1954. What other investment brings you back $2 to $5 for every dollar paid out?

NOTE: Current demand for Spencer Ammonium Nitrate exceeds supply. Your dealer may not be able to fill your order. We are operating our plants 7 days a week, 24 hours a day, doing our best to increase output.

Only Spencer "Mr. N" Ammonium Nitrate comes to you in a *polyethylene-lined* bag for 100% dryness. Spencer Chemical Company, Dwight Bldg., Kansas City, Missouri.

Grass for grain

From page 58

Despite the fact that Ladino is not recommended for his area, Nellen has found it keeps coming back each year.

Every acre on this farm is put to use. The 8-acre woodlot furnished very poor grazing when the farm was bought. But, gradually the brush and thistles were eliminated so that plowing could be done between the trees. Then the area was seeded to a pasture mixture. Although it's difficult to ration the grazing because of the trees, a pasture program has been set up for the tract.

Most Carver County dairymen wait until May 15, or later, before turning their cows into pasture. Not so with Nellen, however. He has a lush growth of rye ready for his herd by May 1. Then, during the summer, the cows also get a chance to graze on Piper sudan grass. The rye furnishes grazing in late fall, too. The cows are usually on pasture through October and the first week in November.

In switching over to an almost exclusive roughage-feeding herd program, this dairyman discovered he had "grain cows" and "roughage cows."

"Cows need to be gradually weaned over to an all-roughage feeding setup,"

> **There is nothing so strong and safe, in any emergency in life, as the simple truth.**
> — *Dickens*

Nellen warns. "That's especially true if they've been getting plenty of grain. Instead of making an abrupt change from grain to almost all roughage, it's better to make the change gradually."

A pasture management program needs to be studied out carefully, Nellen advises. He says immature pasturage grown on a fertile soil is not only the best single known feed for dairy cows, but the vitamin-A content of the milk is superior to that produced by any other feed. As pasture plants mature, the percentage of protein becomes less and the crude fiber becomes more woody and less digestible.

"That's why rotation grazing is so important," Nellen emphasizes. "It keeps a thick stand of young grass before the cows during the entire grazing season. I'm attempting to have good forage before my cows at all times during the grazing season."

In winter months, Nellen limits hay to about 5 pounds per cow, but feeds large amounts of long-grass silage—100 pounds or more per cow each day. "Why chop forage for grass silage?" he asks. "Let the cows do the work."

Although this dairyman has greatly reduced the amount of grain fed, he still hopes to do better. He's convinced that a cow can get along on even less than 1 pound of grain for every 9 pounds of milk. Better pastures, and long-grass silage the year round, are the two factors that will do the trick, Nellen believes. **END**

New nitrogen soil tests now in use

Microbes are telling Iowa farmers how much nitrogen they need to add to their soils. This is how it's done.

Farmers send their soil samples to the Iowa State College Soils Laboratory at Ames, Iowa. Scientists there incubate the soil samples; that is, they store the soil in temperature and moisture conditions microbes like best.

Microbes go to work, much as they do in the soil, converting organic matter to the nitrate form of nitrogen. After two weeks, the scientists measure the amount of nitrate. They can tell from this how much nitrogen any farmer's soil needs. It's a quick and accurate test for nitrogen, since practically all nitrogen is made available to plants when microorganisms decompose organic matter.

Soil samples from 200,000 acres in Iowa were tested for nitrogen in this way in 1953. At present, Iowa is the only state using this method, but other states are studying it.

In the 1953 trial run, John Hanway, in charge of the Iowa soil-testing laboratory at Ames, Iowa, checked the nitrogen recommendations based on these tests, with the yield increases resulting in the fields. With the facts he obtained, Hanway feels that he can pretty well predict the most profitable nitrogen application for the various soils being tested.

Hanway makes the following suggestions to Iowa farmers who send in soils for the nitrogen test:

- Send in your soil sample by March if you want to use the recommendations for the 1954 crop year. One month is usually needed for the test.

- Send in different samples for fields with different cropping histories and different soil types.

- Let the sample dry out naturally. Do not heat the soil as this will kill microorganisms and give an untrue test.

- Include this information: Crops grown in the last 2 years; crops to be grown; soil type and its drainage, and recent fertilizer and lime applications.

Do you plan to move?

If you are going to move, please let us know five weeks beforehand if possible. Send your change of address to *Successful Farming*, Des Moines 3, Iowa, giving both your *old* and *new* addresses.

SPRINKLER IRRIGATION UPS TOBACCO YIELD 500 POUNDS PER ACRE

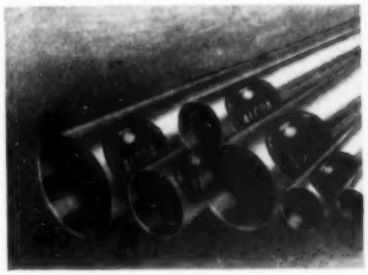
Better quality leaf brings him higher prices, too —says grower

Lancaster, Pa.—Striking proof of the benefits of lightweight, portable irrigation systems is shown in the picture at right. Displaying the significant difference between tobacco grown on irrigated and nonirrigated acreage is grower Rudy R. Landis of Lititz Pike. Mr. Landis raised his crop on nearby Buckwalter Farm.

As Landis explains it, sprinkler irrigation through Alcoa Aluminum Pipe was used on a six-acre planting of cigar tobacco. Adjoining acreage was also planted to tobacco but was given no supplementary irrigation, thus allowing an accurate comparison.

"We not only got a substantial increase in yield from the irrigated acreage, but also in quality", Landis states. "The irrigated leaf was longer, had better body to the shank and matured earlier, giving us the benefit of extra curing time. Our actual yield was about 500 pounds more per acre on the irrigated land, and the tobacco itself brought ten cents more per pound."

Whatever your crop is,
Wherever your State,
To add to your profit,
Just irrigate.



Sprinkler irrigated tobacco at left brought ten cents more per pound than nonirrigated leaf at right.

Tempered Aluminum Alloy Fits Alcoa Pipe for Rough Service

Backbone for the most reliable sprinkler system is Alcoa Aluminum Pipe. The development of exhaustive tests, it is made from a superior, heat-treated alloy that withstands rough and continued usage. It needs no painting. Only one third the weight of comparable steel pipe, it has a smooth inner surface that assures free-flowing performance at minimum pumping pressures. Available through leading systems dealers. Alcoa Aluminum Irrigation Pipe comes in diameters to suit individual system requirements. To identify pipe made to these rigid specifications, look for the blue and yellow Alcoa label on the pipe you buy.

Member of SPRINKLER IRRIGATION ASSOCIATION

ALCOA ALUMINUM

Copyright 1954 Alcoa

ALUMINUM COMPANY OF AMERICA

2135-C ALCOA BUILDING, PITTSBURGH 19, PENNSYLVANIA
Please send me a free copy of *Pipelines to Profit*.

Name _____

Address _____

City _____ State _____

GOOD SEEDING PAYS

IT SEEDS

IT PACKS

Famous Western Sprocket Packer and New Western precision built Seeder. Reasonably priced. Combines two operations in one. Pays for itself in saving seed, especially Alfalfa, Clover or any Grass Seed, sown mixed or separately. Even, accurate seeding of all seeds.

Seed drops, ahead of Packer and is pressed firmly into soil by both Packer and Mulcher wheels. Leaves surface mulch without grooves. Helps prevent washing and crusting. Holds the moisture. Gives every seed best chance to grow. Seeder mounted or removed quickly. Write for full information on combined unit of Seeder or Packer separate.

NEW BEAR CAT COMBINATION Grain and Roughage Mill also Ensilage Cutter

No. 4A

Trailer Mounted for Power Take-off Has traveling feed table and is especially designed for grinding or chopping larger quantities of loose or baled hay and roughage of any kind. Furnished either with or without Trailer Mount and Power Take-off. Both cutter knives and heavy swing hammers—it grinds any feed, green, wet or dry, snapped or ear corn, roughage bundles or baled flakes, with ordinary farm tractor—and no monkey business. Get full information on real honest-to-goodness grinding outfits. Write

Western Land Roller Co., Dept. 606
—Hastings, Nebraska—Manufacturers—

SAVE TIME, WORK, MONEY
WITH THE ORIGINAL
SELF PROPELLED-CENTER DELIVERY
OMC WINDROWER

WITH MANY PATENTED FEATURES

ONCE OVER... ALL OVER. Use in place of tractor drawn windrower, mower, and side delivery rake. Release your tractor for other uses. Sizes—10', 12' and 14' cuts. Over 3000 satisfied users. Motor sizes 15 H.P. and 21 H.P.

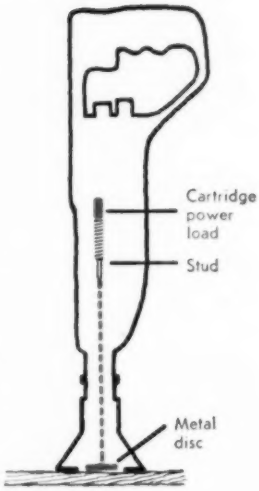
OWATONNA PORTABLE ELEVATORS

All the features you want.... 3 different double chain models, a price for every farm.

Write today for FREE information.

OMC EST 1863 **OWATONNA MFG. CO., INC.**
OWATONNA 5, MINNESOTA

How to use Cartridge-powered tools



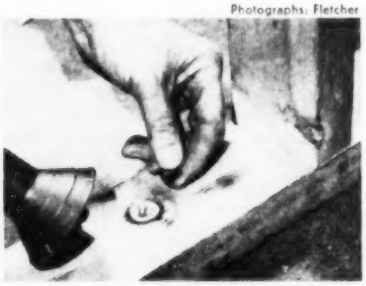
By V. J. Morford
Iowa State College

Here's a tool that uses blank cartridges to drive special nails or bolts into concrete and even ½" steel. Yet it's safe and can be operated by one man. It may have applications on your farm. How it works is shown in the drawing and photographs.

Though the tool might be considered expensive, the major advantage in using it is for [*Turn to page 132*

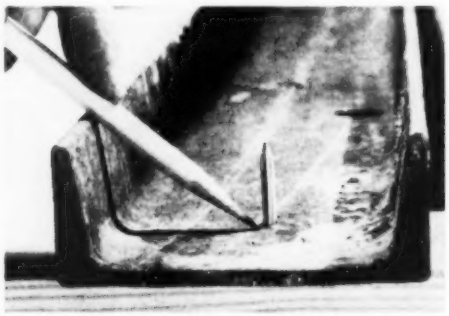
Photographs: Fletcher

Plastic heel cap, between cartridge and stud, is colored to indicate the amount of charge, one of 5 strengths. The muzzle guard is flat-sided for use nearer objects

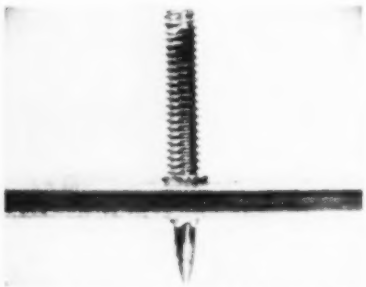


For use with soft material, such as wood, metal disc is placed in muzzle to control penetration of stud. This sill needs no anchor bolts to hold it to the foundation

Special studs with threaded tops will hold stanchions securely. To be fired, gun must be straight, pressed to surface, held as shown



Nail of special alloy was driven through a 2x4 and ¼" thick part of channel. Nail can be clinched, but is not needed for strength. Cost of the cartridge plus nail is about 20 cents, not counting rent for the tool



Biggest advantage of tool is in saving labor. This ¼" stud might be used to hold an electric fence insulator to a steel post

Studs driven into joints of masonry walls hold electrical-outlet boxes, clips, and hangers. Four firms now make cartridge tools

Help increase yields from limited acreage—Improve stands, regardless of seed quality

1. This year's profits may depend on the yields per acre you get from limited acreages. Effective seed treatment is one low-cost step you'll want to take to get those *extra* bushels per acre.

2. Get the best seed you can but—regardless of quality—treatment will help it grow better. Treatment increases stands and yields yet costs only a few cents an acre. Under unfavorable growing conditions it may save reseeding an entire crop!

All Seed Grains Need "Ceresan" Protection

For more than 20 years farmers have increased yields with "Ceresan." It's the superior product, known and recognized as the standard for seed disinfectants. "Ceresan" gives each seed a protective coat and also releases a disease-killing vapor that penetrates every part of the bag or bin. Use it on wheat, oats, barley, flax and rye to get more clean grain per acre.

Grass & Legumes Catch Better with "Arasan"

You can get far more pasture and hay from the *same* amount of seed by treating it with "Arasan." Alfalfa yields increase as much as a ton per acre. Soybeans, too, need "Arasan" treatment, because dry, fall weather cracked the seed coats, making it easy for seed to rot in the soil. "Arasan" seals these cracks.

Corn, Beans and Peas Need I & D (Insect and Disease) Protection

If you suspect wireworm or maggot damage, seed may need protection against insects *and* disease. Du Pont I & D Seed Protectant does both jobs well. Contains lindane to kill soil insects, plus "Arasan" to prevent seed rot and seedling blight. It's proven for field corn, sweet corn, beans, peas, vegetables.

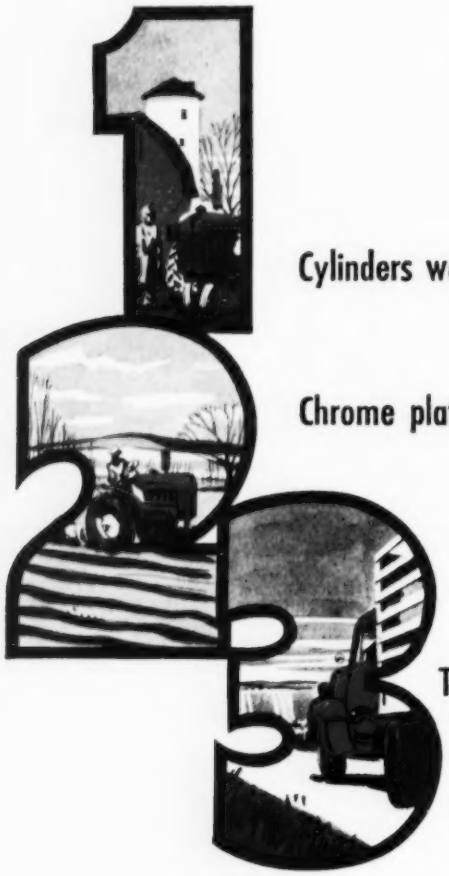
See your seed treater or dealer now

DU PONT
REG. U.S. PAT. OFF.

Seed Disinfectants

BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*

a syllogism* for farmers...



Cylinders wear most at the TOP

Chrome plated rings retard wear

Thus, TOP rings must be chrome plated to retard cylinder wear!

If you want the *full* benefit of chrome piston rings in your car, truck, or tractor, remember this—**no so-called "chrome" set is complete unless it offers the protection of chrome where most wear occurs . . . on the TOP ring rather than the oil ring alone!**

That's why Perfect Circle's 2-in-1 chrome ring set has *both* top and bottom rings plated with thick, solid chrome. And the pay-off? It's thousands and thousands of extra hours of top performance, even under the most severe kinds of farm service!

For new engine life, sustained power and oil economy—with no tedious break-in period—install Perfect Circle's 2-in-1 Set on your next re-ring job! Perfect Circle Corporation, Hagerstown, Indiana; The Perfect Circle Co., Ltd., Toronto, Ont.

* Deductive reasoning!

Solid chrome plating on top and bottom rings gives wear protection throughout entire area of ring travel. Only 2-in-1 furnishes alternate HiPressure spring with every oil ring, for badly worn engines.

Perfect Circle

2 in 1 chrome piston rings

The standard of comparison

Cartridge-powered tools

From page 130

the savings in labor it makes possible. Commercial users have reduced labor costs as much as 75 percent because they can do jobs 5 to 50 times faster. You can do jobs on your farm just as fast—and easily. Rather than buy the tool yourself, perhaps you can rent one from your local lumber or hardware dealer.

It is often possible to drive the special nails or bolts into wood, concrete, steel, or mortar joints at the rate of one every 20 seconds. The studs, as these fasteners are often called, are used in joining materials or attaching equipment or fixtures to them. Cast iron, spring steel, and glazed tile are materials on which cartridge-powered tools can *not* be used.

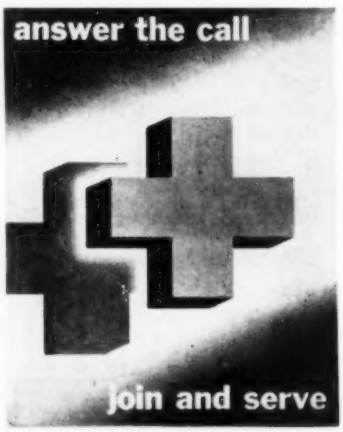
Blank cartridges have been put to many unusual uses by devices that control energy in powder. They have operated fire extinguishers, warning alarms, riveters, cable splicers, and others. The cartridge-powered tool, now manufactured by four companies, is one more. **END**

Only Bang's-free hogs can travel

A new Illinois swine brucellosis law states that all swine over 4 months of age must be blood-tested and found free of brucellosis before the owner can exhibit, sell, or offer the animal's service as breeding stock.

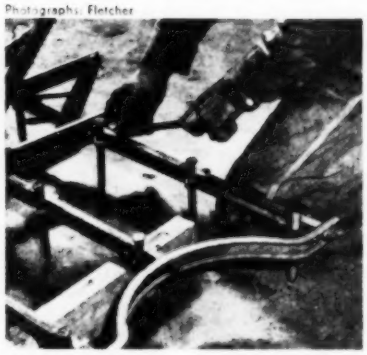
Such animals must be blood-tested within 60 days of the date of sale or service. Swine exhibited within the state must be tested within 90 days of the date of exhibition—those from other states within 30 days of the time they were shipped in. In all cases, a health certificate, showing a negative reaction to the brucellosis blood test, must go along with the animal.

If any animal shows a positive reaction, it must be tagged in the left ear and can only be sold for slaughter.

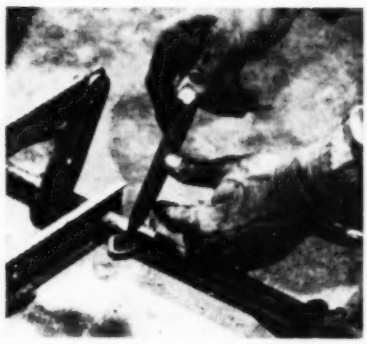


Work over your harrow —NOW

Photography: Fletcher



Examine harrow to see if teeth need sharpening. Front edges should be sharp. If teeth have diamond cross section, they can be "turned" rather than sharpened



After clamps are loosened and teeth removed, put corners of frame on blocks, 4" high. Drop teeth loosely into place so all will strike floor at same level, correctly adjusted for depth. Then tighten clamp nuts

Examine frame for bent parts. You may have to remove them for straightening. Look at drawbar, eye-bolt holes, draft rods. Replace broken parts or weld them. Maybe you can build up bolt holes with welder

How to repair disc is on page 138

EZEE FLOW Hydraulic Loaders

Made to fit more than 80 different makes and models of tractors. 10 attachments with quick on and off features let you do hundreds of jobs from your tractor seat—easily and economically.

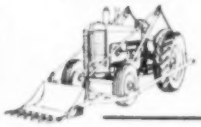
EZEE FLOW Fertilizer Spreaders

Help increase yields on farms large and small. Positively guarantees "exact rate" spreading of any fertilizer (10-5,000 lbs. per acre), and "exact rate" sowing of grain, most legumes and grasses (even brome).

EZEE FLOW farming helps boost your farm profits

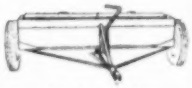
• Ezee Flow "50"

• Ezee Flow "LS"

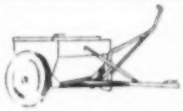


• Ezee Flow "505"

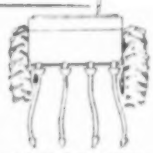
• Model "120"



• Model "100"



• Model EW "55"



• Model SD "50"

Find Out How To Make More MONEY the EZEE FLOW Way

Ezee Flow Division
Avco Distributing Corp. Dept. SF-4
10 S. LaSalle St.
Chicago 3, Illinois

Send at once the free literature I have checked below:

☐ Ezee Flow Hydraulic Loaders

☐ Ezee Flow Fertilizer Application Guide For Major Field Crops

Name_____

Address_____

Town_____ State_____

EZEE FLOW DIVISION AVCO DISTRIBUTING CORPORATION

Don't be a "putter-offer"

Millions have changed to Tampax sanitary protection—why not you?

Some people act. And some people think about acting. They are full of things they plan to do, places they intend to go, products they mean to try. And they miss out on a lot!

It's nobody's business but yours whether or not you decide to adopt Tampax. But don't waver about it! Don't keep on saying (even to yourself): "Some day I really must try Tampax." If you've gone that far in your own mind, try it! It's scarcely a bit more revolutionary than changing your hair-style.

NO BELTS
NO PINS
NO PADS
NO ODOR

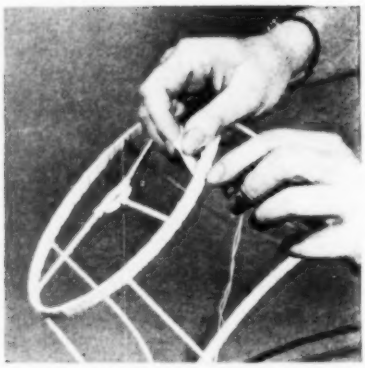
For honestly, many of the women you most admire (the leaders, the doers, the socially poised) do wear this internal sanitary protection. Why? Because it's invisible and unfelt when in place. Because it protects against odor, chafing and irritation. Because it's easy to insert, change and dispose of. *Because it makes a whole lot of sense!*

Why not get Tampax in your choice of 3 absorbencies (Regular, Super, Junior) this very month! At any drug or notion counter. Month's supply goes in purse. Tampax Incorporated, Palmer, Mass.

Accepted for Advertising by the Journal of the American Medical Association

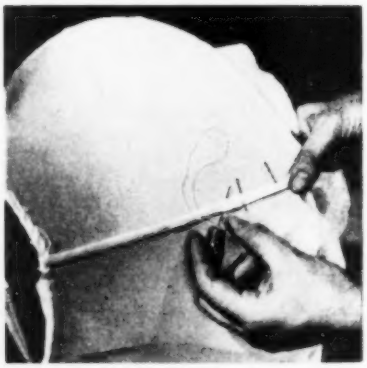
A lampshade *you*

Your fabric and a little white paint are all you need to start



1. Remove old cover and paint frame white to prevent rust. Wrap top and bottom of frame as tightly as possible with ½-inch twill tape and sew the ends securely to bars

3. Stitch side seams twice with heavy-duty thread and trim to ¼ inch. Slide on lampshade, seams inside and over bars. Pin evenly and tautly to frame, sew, and trim



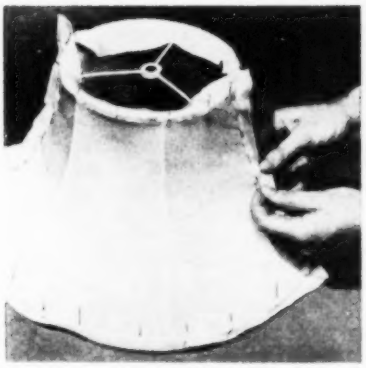
4. Cut ¾-inch-wide bias strip. Turn both edges under, press, and pin down, covering the two seams. Stitch in place. This is also an attractive trim when sewn over each rib

6. Cut strips of lining material 1 inch wide. Fold in three with edges on inside. Sew these around crossbars as you sew in lining, trim edges to ¼ inch of stitches

7. Cut two 6-inch bias strips to trim top of shade. Fold each in half, turn under the edges and baste together. Twine the two together loosely. Pin, then tack in place

can make yourself

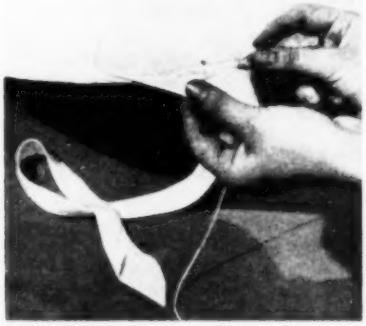
By Claire Miller



2. Cut two pieces of fabric 3 inches longer than shade and 2 inches wider than half around bottom. Pin the seams to fit tight, and remove. Cut lining same size as cover

3. Sew side seams of lining, making seams ¼ inch larger than outer covering. Put lining on inside of frame, matching seams with cover. Pin and sew bottom, then top

Photographs: Hopkins, Fletcher



8. Cut bias strip 2½ inches wide. Fold in half, baste edges together. Press. Stretch and pin raw edges, 4 inches at a time on outside of shade. Sew, turn band up. END

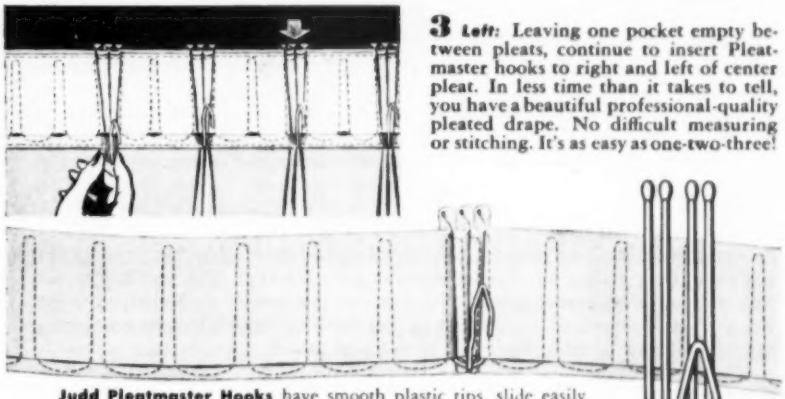
HERE'S HOW YOU CAN MAKE

Beautiful Pleated Draperies in Minutes

Get Judd Pleatmaster® Tape and Hooks and follow these three easy steps

1 ***Above:*** Sew Pleatmaster tape across top of your drapery material. Tape comes with pockets for hooks already formed in it.

2 ***Right:*** Insert arms of Pleatmaster hook into four center pockets. This automatically gathers material into a perfect pinch pleat.



3 ***Left:*** Leaving one pocket empty between pleats, continue to insert Pleatmaster hooks to right and left of center pleat. In less time than it takes to tell, you have a beautiful professional-quality pleated drape. No difficult measuring or stitching. It's as easy as one-two-three!

Judd Pleatmaster Hooks have smooth plastic tips, slide easily into pockets without snagging. Quickly removed and replaced when draperies are cleaned. Pinch base automatically forms perfect pinch, box or cartridge pleats. For wall installations get No. 1684 Hooks. For ceiling or recessed installations, No. 4684 Hooks.

Pleatmaster Tape is all ready to use, with pre-formed pockets and finished edges — and it is *Sanforized*. Department stores, variety stores, specialty shops — all have or can get Judd Pleatmaster Hooks and Tape. Ask for them today.

U. S. PAT. NO. 2,558,467

NEW JUDD BOOK — brimming with ideas for modern, decorator-styled window treatments, plus easily-followed instructions for making your own drapes. Send 25¢ in coin.

Your new draperies will look better on modern Judd Traverse Tracks. Open and close smoothly at the touch of a cord.

JUDD decorator-styled **Drapery Fixtures**

H. L. JUDD COMPANY • Dept. SF-3 • Wallingford, Conn.

Let's look at the Facts!

NOT MORE ACRES, BUT MORE PER ACRE...
DECREASES YOUR COSTS AND INCREASES YOUR PROFITS

Producing more per acre . . . more per animal . . . more per man hour of labor . . . you cut your costs. You can do this without adding to surpluses. Merely produce more on fewer acres thereby reducing your unit costs. For example, fixed costs such as ground preparation, planting, cultivating, etc. may be $31.66 per acre of corn. If you produce 50 bushel per acre, your fixed costs per bushel would be approximately 64¢. But by producing 80 bushel per acre your fixed costs would be only about 40¢ per bushel.

To produce more per acre you must follow good soil management practices with the use of more fertilizer per acre. Your State Agriculture College Extension Service and Experiment Station, the County Agent or your DAVCO Agent can supply you with the latest recommendations . . . amounts per acre and the right analyses to use. Years of actual experiments, conducted by your State Agriculture Experiment Station, have proved their recommendations to be practical as well as profitable.

When ordering fertilizer order the best in fertilizer . . . DAVCO Granulated Fertilizer. Your dependable DAVCO Agent has a good supply of all recommended analyses and he is anxious to explain the many ways DAVCO Granulated Fertilizer makes farming easier and more profitable.

DAVCO GRANULATED FERTILIZER

NOTE: It will pay to get your spring supply of DAVCO Granulated Fertilizer today. The best selection of analyses is available now, in excellent condition. DAVCO Granulated Fertilizer stores well and comes out of storage in good drilling condition.

Progress Through Chemistry

THE DAVISON CHEMICAL CORPORATION

Baltimore, Maryland

Plants in Alliance, Ohio; Baltimore, Maryland; Columbus, Ohio; Lansing, Michigan; Nashville, Tennessee; New Albany, Indiana; New Orleans, Louisiana; Perry, Iowa; Savannah, Georgia.

Seed variety . . .

Key to good frozen vegetables

Good frozen vegetables actually start from the seeds you plant. Experiments done at state agricultural colleges and by seed companies have shown which of the well-known varieties take best to the freezer. Researchers have also worked on the development of special varieties that behave well during freezing.

This year, check before you buy—consult your county agent, your seed catalog, and your seed dealer to learn recommended freezer varieties. And don't forget to make a note of the kinds you plant—next year you'll know from your own experience whether to repeat or make a change.

Here are some of the vegetable varieties suitable for freezing:

Asparagus—Mary Washington, Martha Washington.

Green beans—Kentucky Wonder, Topcrop, Wade, Supergreen, Tendergreen, Giant stringless greenpod.

Broccoli—Italian green sprouting, Freezer's sprouting green.

Sweet corn—(for corn on the cob): Golden freezer, Cream O'Gold, Golden Bantam; (for cut corn): any good table corn, especially hybrid varieties.

Peas—Freezonian, Shasta, Little Marvel, Thomas Laxton.

Sells hogs on yield and grade

If you live near a packer who buys hogs on a yield-and-grade basis, you'll profit by the experience of Ken Oakleaf, Red Oak, Iowa.

He took his hogs to market in two lots, selling one lot on the yield- (dressing percentage) and-grade basis, and the other lot on a straight liveweight basis. His hogs weighed an average of 189 pounds, and were a meat type.

What happened? Oakleaf got 50 cents over the top price that day for his meaty hogs sold on a straight basis. But—by selling the other lot on a yield-and-grade basis, he took home $1.35 more per hundredweight.

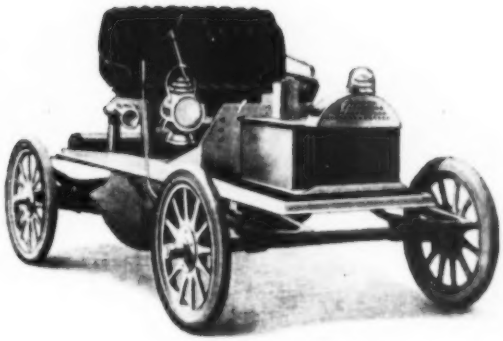
One month later Oakleaf again sold hogs on the yield-and-grade basis. This time the 200-pound hogs went for $1.85 per hundred over the top price of the day.

Oakleaf believes that hogmen who think they have better quality hogs than the run of the market should sell on the yield-and-grade basis. You'll get docked on some, but get more on others.

What a Difference

Between the Oldest and the Newest

BUICK



This 1903 "buckboard" model was the earliest of all Buicks. It had neither windshield nor mudguards, but it did have a two-speed transmission and a dependable two-cylinder engine which developed 21 horsepower.

The spectacular "Skylark" has a 200-horsepower engine to send it winging on its way. The sleek body is carried on a chassis with 122-inch wheelbase, and the car is less than five feet high even when the top is up.

And What a Difference in Plug Performance Since AC Developed the Patented CORALOX Insulator

AC SPARK PLUGS

PATENTED *CORALOX* INSULATOR

Original Equipment on Nearly as Many New Cars and Trucks as All Other Makes Combined

The 1903 Buick was as much a sensation in its day as the sleek new "Skylark" is today. But what a difference that half century has made in Buick appearance and performance! AC Spark Plugs have a similarly brilliant record of improvements—the latest and greatest of which is the patented *CORALOX* Insulator.

CORALOX has no chemical attraction for the oxide coatings resulting from the burning of leaded fuels. What's more—*CORALOX* is so amazingly strong that AC can use longer, thinner insulator tips which heat up faster to burn away oil and wet carbon. Since *CORALOX* resists *both* oxide and carbon coatings—the most frequent causes of plug misfiring—many farmers—

- **GET UP TO 10% MORE POWER**
- **SAVE UP TO ONE GALLON OF GASOLINE IN TEN**

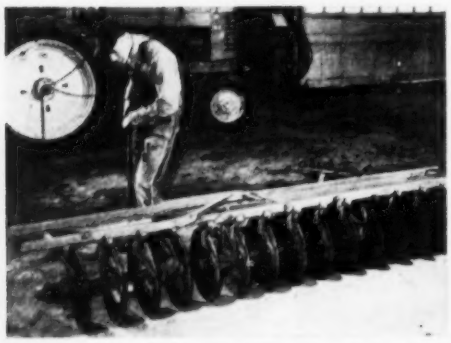
The next time you change plugs in car, truck or tractor, insist on ACs. You will soon see the difference patented *CORALOX* makes in performance and economy.

AC SPARK PLUG DIVISION GENERAL MOTORS CORPORATION

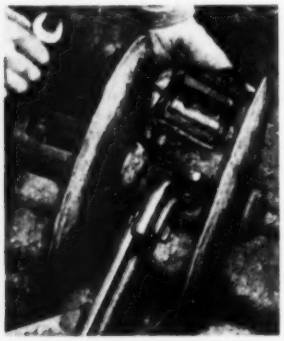
How to Repair your disc harrow

Check your disc *now* to save time later. These points will help:

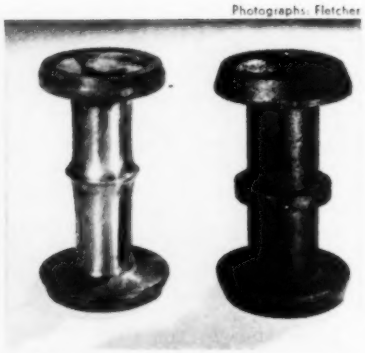
Photographs, Fletcher



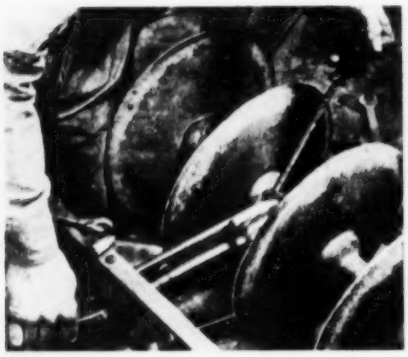
1. Examine disc for broken parts, loose and lost bolts. Make a list of obvious repairs necessary. Raise and lower frame, using pressure against arbor to estimate amount of wear in bearings. Disconnect gangs and put them in a position for working on them easily



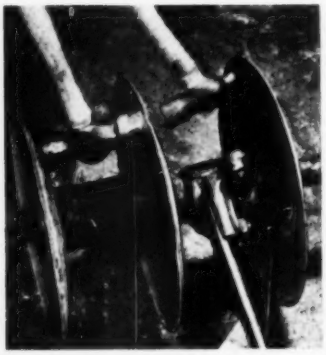
2. Remove bearings caps, check bearings. If they are broken or worn so bearing spool rubs boxing, replace the blocks. Maple bearing, shown here, is not bad



3. Thoroughly clean bearing by scraping, washing in kerosene. Chilled metal spool shown at left is worn badly, should be replaced with new one. Try to "catch" worn parts like this before more damage is done

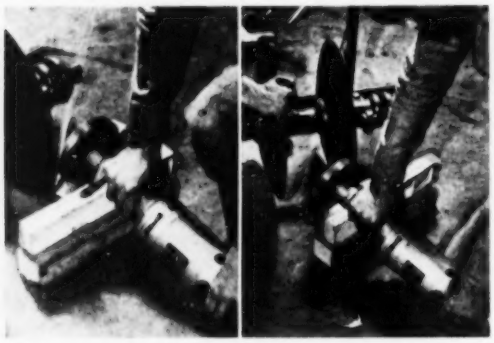


4. While bearing is apart, remove grease fitting, run wire or rod through grease tube to make certain it is not plugged. Replace any grease cups with high-pressure grease fittings. Disc must be greased frequently, easily, and quickly



5. Using hammer or other heavy object to "back up" disc, hammer out any dents. Replace discs with diameter 1½" less than original. Remove bent arbor bolts to straighten

6. Replace arbor bolt, make certain that arbor-bolt nuts are tight. Increase leverage with pipe, if necessary. Check to see if nuts are *locked* with special locking unit under nut. Also, check rest of nuts for tightness



7. Support gangs so discs can be turned for sharpening. Hold grinding wheel against inside face of disc, rotate it opposite to direction of grinder. Take out dents, make edge straight. Then grind other side, if you have this type disc, holding grinder at an angle. Protect your eyes

8. Straighten bent parts, examine scraper blades, adjust blades so rear edge is 1" in front of disc cutting edge with end touching the disc

9. Before storing harrow, use oil, grease, or rust preventive on discs so they will scour when next used. Check over, repair, and oil all levers, latches, and links. Paint entire implement except the greased discs

Ask for G-E Motors and Control on all Electrified Farm Equipment you buy!

GENERAL ELECTRIC

FarmNewS

Ask for G-E Motors and Control on all Electrified Farm Equipment you buy!

MORE POWER TO THE AMERICAN FARMER through more electricity on the farm

STOCK WATERERS SAVE WORK FOR FARMER

FARM WIFE SOLVES GARBAGE DISPOSAL PROBLEM

Finds source of soil-enriching mulch for garden

Mrs. Spencer using her mulch-producing garbage disposal unit, located on back porch.

Mrs. C. B. Spencer, Route 1, Downingtown, Pa. has been using a garbage disposal unit which turns her kitchen garbage into a fluid mulch. Mrs. Spencer is well satisfied with her unit. She says, "I've used it every day for the last two years. It takes care of my garbage and makes it odorless and ready to use as a fertilizing mulch. I use the mulch in my garden around strawberries, tomatoes, flowers, and shrubbery."

Removes objectional odor

This machine quickly reduces garbage to an odorless mulch. No need to store any garbage for collection or to bury garbage and then worry that animals will dig it up. The fluid mulch returns organic matter to the soil and helps the soil to retain moisture.

Has other uses

The unit will produce mulches from leaves, manure, cuttings, or even newspaper. Sharp cutting edges transform materials into a fluid mulch. The machine does in minutes what a compost heap takes months to do.

The unit is powered with a dependable G-E motor. For more information check "Garbage Disposal" on the coupon to the right.

They work automatically, won't freeze in winter, help boost meat production by adequate watering

One of the electrically heated automatic stock waterers in use on Oryne Kersten's farm. It warms the water to assure plentiful supply for his animals even in coldest Iowa weather.

"Thanks to my automatic stock waterers," says Mr. Oryne Kersten of Dysart, Iowa, "I can water 50 head of cattle and 100 head of hogs without lifting a finger. What's more, I don't have to chip ice in the winter." Mr. Kersten raises registered Hereford beef cattle and spotted Poland-China hogs.

Completely automatic

Mr. Kersten saves time and labor by eliminating tedious watering chores. Stock waterers have precision-made float valves which insure that troughs will be full at all times.

Won't freeze in winter

There's no chipping ice out of watering troughs because an electric heating unit keeps them free of ice even in subzero weather. Just set the thermostat in the fall and forget about it. Water is kept at temperatures at which animals will drink more readily. Remember that water helps to make beef and pork.

These waterers are protected against corrosion, and are insulated to minimize heat loss. A G-E CALROD* heating unit provides the heat and a thermostat turns it on and off for economical operation. Animals can't reach the heating unit. For more information check "Stock Waterers" on the coupon.

*Registered Trademark of General Electric Co.

ONE MAN TAKES CARE OF 6000 BREEDER CHICKENS

Mechanical feeders save work for New Jersey Leghorn breeder

"I've been using two automatic feeders for two years," says Mr. Gus Stern, owner-manager of Stern Bros. Hatchery, South Vineland, N. J. "One man now easily takes care of 6000 Leghorn breeders. He could take care of 12,000 if necessary. Using the old hand feed method, a man could take care of only 3000 birds and work harder doing it."

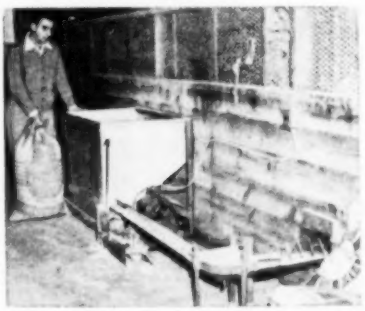
Cuts feed handling

Each feeder holds up to 700 pounds of mash, so one filling lasts for a long time. Since both feeders are in one room, where feed is also stored, all filling and feeding is done in one place.

Continuous chain carries feed from bin through a V-shaped feeding trough. Uneaten feed is returned and mixed with new feed to maintain freshness.

Troughs do not clog or overflow. Also, because there is no bridging of the chain over the mash, all mash is moved through the trough. Feeders are easy to install, easy to maintain, easy to clean.

These automatic poultry feeders are powered by G-E gear motors. For more information please check "Poultry Feeders" on coupon.



Mr. Stern and one of his automatic poultry feeders. Bin holds up to 700 pounds of mash. Agitator in bin keeps feed flowing. Notice wire guards on trough and guard on corner.

General Electric Company
Section 671-25G, Schenectady 5, N. Y.

I would like additional information on the following equipment.

- ☐ Stock Waterers
- ☐ Garbage Disposal
- ☐ Poultry Feeder
- ☐ How To Choose Your Motor

NAME _____

ADDRESS _____

CITY _____ STATE _____

GET new PENDISTRIN!

It gives MORE THOROUGH DISPERSION

It's MORE EFFECTIVE in treating MASTITIS

The new Squibb Base of *New* Pendistrin assures more thorough dispersion of the two highly potent antibiotics.

New SQUIBB base readily disperses highly potent antibiotics

Now Squibb brings you *New* Pendistrin with the new Squibb Base ... to help you control mastitis more effectively than ever!

New Pendistrin still contains the same highly potent antibiotics as before—100,000 units of penicillin and 100 mg. of dihydrostreptomycin. Research has found these two antibiotics to be most effective against the usual mastitis-causing organisms.

But now, *New* Pendistrin gives you these antibiotics in the thorough-penetrating Squibb Base—plasticized hydrocarbon gel. This new base provides for more thorough dispersion throughout the treated quarter by releasing the antibiotics more completely.

The new Squibb Base remains soft even in cold weather.

Get *New* Pendistrin from your druggist today!

For more information, write to: SQUIBB *Veterinary Department*, 745 Fifth Ave., New York 22, N. Y.

Buy the "BARN BOX" ...and SAVE!

When mastitis strikes—be ready! Keep this handy "barn box" on your shelf ... no refrigeration required. You save money, too, when you buy by the dozen! Ask your druggist for barn box of 12 tubes of *New* Pendistrin.

See your druggist today!

For accurate diagnosis of mastitis consult your veterinarian.

PENDISTRIN is a trademark

SQUIBB—A NAME YOU CAN TRUST

Here's what we want

From page 51

people who are starving here in America, so why worry about surpluses? Why not give them food—instead of money—to reduce our surpluses?

W. E. VanPelt, Dayton, Virginia: The only way we can get on a solid basis is to let prices come down to a level where we can have foreign trade which would give us a ready market for our products.

J. I. McChesney, New Galilee, Pennsylvania: Research, education, and conservation should be our main lines of offense.

Frank R. Reagan, Wolcott, New York: First, I'd knock subsidized farming right off the nation's law books. Most "surplus" crops would cease to be, since we would no longer guarantee payment for food and fibers we don't need. Second, I would ask Congress for a law to enable responsible farmers to have federally backed credit to help cushion the farm economy in areas of drouth, storm, or crop failure. Finally, I would ask for a law enabling authorities, when absolutely necessary, to step in and buy *at market prices* any food or fiber that is piling up—for overseas shipment to stop communism in its tracks.

George Weissert, Plymouth, Indiana: I would guarantee 100 percent of parity for all farm products used in the United States—and sell all surpluses in foreign markets. The farmer would receive the price paid on these markets.

Fred Brunner, Jr., Cranbury, New Jersey: Acreage control will ruin American agriculture. It always works in favor of the big operator, and ruins the small, family-owned farm. If we have to have an acreage reduction, then let the big operators take a 30-percent cut and let the grower with 30 acres or less alone.

Leonard Linn, Dupree, South Dakota: We need to do a better job of selling to the housewife through advertising.

Fred Büttler, Fort Scott, Kansas: I say get the banker, doctor, land company, rail workers, and others who don't make their living from the farm out of the farming business. Then license the real farmers to protect them. These other people have their jobs protected by law, license, or union—so why not protect the farmer *from them?*

Floyd A. Martin, Genoa, Colorado: I say take price supports off of everything, including industry and manufacturing. If it is necessary to have price supports and controls, these controls should favor the little operator so he can make a fair living, too.

Joseph H. Rhea, Tucson, Arizona: Remove all limitations on acreage and

production as soon as possible and let the farmers determine what and how much they will plant and raise. Farmers today are better educated, and more experienced—so are better judges of what to produce then ever before.

We don't have to leave our "surplused" country to find people who need things we now call surpluses.

Edison B. Stark, Grand Ledge, Michigan: I would include in any loan or gift to a foreign country, a "package" of wheat, corn, lard, oils, meat, and other farm products. Then they'd have guns for defense and food for a full belly—the first line of defense against communism.

Park E. Salter, Douglass, Kansas: Supply and demand will take care of prices. I do not believe in subsidies of any kind except in case of war or extreme shortages.

Milford Taylor, New Lothrop, Michigan: I would divide wheat into two classes—that used for human consumption, and that used for livestock. I would tie the price of wheat for human consumption to the price of bread and similar wheat products—and let the feed wheat go for open-market prices.

Farmers would be alloted acres for human consumption and issued invoices for that amount. If he grows more for feed, that's O.K. The processor could buy only human-consumption wheat with an invoice.

Oscar Broers, Eudora, Kansas: In exchange for allotments I would try to establish a two-price system or a barter system with foreign countries—so they could afford to buy our surpluses without a dole system to the farmers as now exists.

George Kautio, South Haven, Minnesota: A free market now would make our great country a miserable land of big landlords, with laborers in tar-paper shacks.

Harlan C. Qualset, Newman Grove, Nebraska: To use up surpluses, I would induce Congress to pass a law requiring all farmers and ranchers to burn fuel containing 10-percent alcohol, made from grain, in their internal combustion engines. On second thought, let's give the whole internal-combustion driving population of the United States this superior fuel.

Frank Blanchard, Defiance, Ohio: I would issue cards to each grower for crops where we have surpluses. These cards would be punched by the buyer when the crop is sold—letting each grower sell a certain amount. I would leave it up to the grower to store the surplus at his own risk. This would stabilize our markets and put the biggest burden on the big grower, where it should be.

It is clear that Congress and Mr. Benson will have a tough time pleasing everyone. But they will have plenty of ideas from which to choose in making up their minds. **END**

buy the fertilizer with

ALL SIX

big bonus factors

1. **ECONOMY**—You save time and money in storing, handling and spreading high analysis pelletized AMMO-PHOS because it contains up to 2½ times more plant nutrients than most other fertilizers. Compare plant food values.

2. **STORABILITY**—AMMO-PHOS occupies only half as much of your valuable storage space. Pellets will not lump or cake if stored in a dry place. Buy ahead with confidence. AMMO-PHOS will be in excellent condition when you need it.

3. **SOLUBILITY**—All plant foods in AMMO-PHOS are completely soluble in water. The method of compounding keeps the phosphorus available longer.

4. **DRILLABILITY**—No sticking or bridging when you drill with AMMO-PHOS. The pellets are dry and free-flowing—provide easier, more even distribution in the field without bothersome dust. Airplane application is simplified.

5. **CHEMICAL UNIFORMITY**—There's no spotty feeding with AMMO-PHOS. Each pellet has a uniform content of the major plant foods . . . the same guaranteed analysis . . . because AMMO-PHOS is chemically compounded. Each plant receives the same proportions of plant foods, resulting in uniform high yields.

6. **AVAILABILITY**—AMMO-PHOS gives you quick-acting, non-leaching nitrogen . . . the most available phosphorus you can buy . . . and potash to fit your soil requirements. The pellets retard the rate of reversion of phosphorus by clay in the soil . . . give plants a quick healthy start and feed through to a successful, big-yield maturity.

MATHIESON

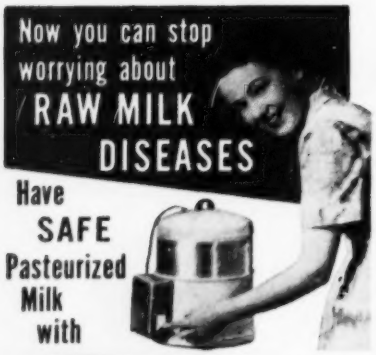
AMMO-PHOS®

FERTILIZER

MATHIESON

MATHIESON CHEMICAL CORPORATION
Mathieson Agricultural Chemicals Division
Little Rock, Arkansas

Now you can stop worrying about RAW MILK DISEASES



Have SAFE Pasteurized Milk with

HOME HEALTH HOME PASTEURIZERS

Milk from tested cows, handled with the best of care, may still contain germs causing undulant fever, typhoid fever, polio and other diseases. Home-Health Pasteurization destroys these harmful bacteria but doesn't destroy nutrition of milk or spoil its flavor. You can pasteurize milk in your own kitchen.

ONLY HOME-HEALTH OFFERS TWO, EASY TO USE, SIZES

FOR LARGER FAMILIES. A two gallon pasteurizer that's compact and light-weight. Positive bacteria kill without loss of flavor. Dual heat principle. Just turn it on . . . it's automatic. Laboratory tested.

FOR SMALLER FAMILIES. Popular one gallon size gives same positive pasteurization. Accurate timer-thermostat. No watching or stirring. Convection Heat Principle. Both models guaranteed for one year . . . Underwriters approved . . . Accepted for advertising by Am. Medical Assn.

FREE FOLDER Get the facts on milk-borne diseases and their prevention through pasteurization. Write

WATERS CONLEY COMPANY

Dept. S Rochester, Minnesota

Save $2.00 On This Home Mixed Cough Syrup

Easily Mixed. Needs No Cooking.

Cough medicines usually contain a large quantity of plain syrup—a good ingredient, but one which you can easily make at home. Mix 2 cups of granulated sugar with 1 cup of water. No cooking! Or you can use corn syrup or liquid honey, instead of sugar syrup.

Then get from your druggist 2½ ounces of Pinex, pour it into a pint bottle, and fill up with your syrup. This gives you a full pint of wonderful medicine for coughs due to colds. It makes a real saving because it gives you about four times as much for your money. Never spoils, and children love it.

This is actually a surprisingly effective, quick-acting cough medicine. Swiftly, you feel it taking hold. It loosens phlegm, soothes irritated membranes, makes breathing easy.

Pinex is a special compound of proven ingredients, in concentrated form, a most reliable, soothing agent for throat and bronchial irritations. Money refunded if it doesn't please you in every way.

FOR EXTRA CONVENIENCE GET NEW READY-MIXED, READY-TO-USE PINEX!

THE PINEX CO., FORT WAYNE, IND.

ZUD GUARANTEED MONEY REFUNDED IF NOT SATISFIED

Removes RUST and STAINS from BATHTUBS, SINKS, COPPER POTS, AUTO BUMPERS, TILE

FREE SAMPLE Give names of your dealers. ZUD is sold at Grocers, Hardware, Dept., 10¢ Stores

RUSTAIN PRODUCTS, 240 E. 152 St., N. Y. 51

How to welcome washday

From page 64

An old "washhouse" became a cozy utility room after the Fred Bolts, Pratt County, Kansas, joined it to their house. The original concrete step was ready-made for locating the washer so it would be easier to load without stooping. A deep drawer with dividers is a handy hamper to keep heavily soiled overalls, socks from light wash.

Large sink is indispensable for laundering, as place to wash vegetables, clean chickens—and also for men's wash-up. Room includes stall shower (at right, above) for the men, and they can get to it directly from outdoors. There's plenty of storage for wraps and clean clothes (see at right).

◀ **Clever built-in hamper:** A wire-mesh covered frame, on wheels. It's in the H. Albers' home, Cuming County, Nebraska

Old commercial-laundry dryer drum recessed in wall is used for soiled-clothes storage in the Fryes' utility room (Iowa)

◀ **A pass-through cabinet** between bathroom and laundry—handy for soiled clothes. In F. Moon home, Pratt County, Kansas.

NEW WAYNE "PE"* PUTS 'EM...

Out In Front

IN EVERY WAY

*PRODUCTIVE EFFICIENCY

For Safe, Strong Starts • Fast, Steady Growth • Early Maturity • More Gain Per Bag

Now...Wayne "PE"...an intricate blend of feed values designed to provide your birds or young stock with all the growing and producing power they can use.

Backed by over 50 years of feed making experience, Wayne "PE" brings you the latest developments in modern-day nutrition...including the judicious use of antibiotics, high energy formulas, arsonic compounds, and other recent developments.

This Spring...put your young stock "out in front" in every way. See your Wayne Dealer today.

ALLIED MILLS, INC.

Builders of Tomorrow's Feeds...Today!

Executive Offices: Chicago 4, Ill. • Service Offices: Ft. Wayne 1, Ind.

WAYNE "HIGH ENERGY" STARTING FEEDS

CHICK STARTER • ROCKET BROILER • TAIL CURLER • TURKEY STARTER • CALF STARTER • CALFNIP Milk Replacer

LIFT-OUT Modern power equipment saves countless hours of farm labor. Modern R·O·W windows lift out from inside the house to save cleaning and painting time. They also eliminate the danger of climbing ladders or balancing on window sills. Write for our free booklet.

See your local lumber dealer or write

R.O.W. SALES CO. 1326-80 ACADEMY AVENUE • FERNDALE 20, MICHIGAN

R·O·W is the registered trade mark of the R.O.W. Sales Co.

Protected against Weather, Vermin
with
Century® asbestos-cement siding

Every farm building can be attractive . . . yet have the all-year-round protection, the durability, the long and maintenance-free life of "Century"® Asbestos-Cement Siding Shingles. There are years and years of protection for the poultry buildings pictured above—protection against all kinds of weather; protection against rust and rot; protection against the costly ravages of vermin. And, "Century" Shingles are fire-resistant!

Furthermore, colorful "Century" Siding Shingles can be applied over your present siding . . . in either Shell White, Sun-Glo Buff, Sea Gull Gray, Fathom Green or Nu-Grain Green, Gray, Brown and Whitetone. *They never need protective paint!* Take the first step toward protecting your farm buildings, your home—send for complete information. See your lumber dealer or write to us.

KEASBEY & MATTISON
COMPANY • AMBLER • PENNSYLVANIA
America's first maker of Asbestos-Cement Shingles

K&M best in asbestos

What's going into your washtub?

If you're mixed up about these new detergents, soaps, and water softeners, here are some helps

It may be rather baffling—the array of laundry aids on the grocers' shelves these days. But at the same time, it's heartening to know that with so many products to choose from, we can work out just the *right* formula for getting good-looking washings in the easiest way. To get good results, though, most of us need the answers to the following questions:

Which are best—soaps or detergents? The "best" is the one that works best in the kind of water you use. You can tell this by giving various brands a test in your own wash. Synthetic detergents were invented mainly for use in hard water. Regular soaps form sticky scum with the minerals in hard water—this scum is the commonest cause of graying, yellowing, and dark specks in clothes. Synthetic detergents (also called syndets) do not form scum in hard water.

How can I tell soap from synthetic detergent? Most soaps say "soap" somewhere on the box.

Can I ever use regular soap in hard water? Yes, if you prefer soap, use it. But *soften the water!* Consider installing a softener unit in your water system—it's a good investment. If you can't go "all out," at least buy a packaged water softener to add to both the wash *and* the rinse waters.

To determine the amount of softener needed for one washerful of water, use this rough guide: Add amount directed on the package. Start washer and gradually add 1 to 1½ cups soap. If this amount of soap fails to give a good suds, add more softener, *not more soap*.

What is a "mild" soap or detergent? Mild soap or detergent is for hand washing dainty fabrics and delicate colors—baby dresses, lacy slips, pastel blouses. It will get these things clean without weakening or fading them. An all-purpose soap or detergent is for machine washing. Cleaning agents have been added which can dig dirt out of grimy towels, play clothes, overalls. (It's almost like comparing cake

Drawing: Doty

flour to all-purpose flour—it's just as necessary to use the right one in the right place.)

How do I know which one is mild? It's easy to tell from the package of soap or detergent the purpose for which it's intended. Most of them say, "for delicate things." On the all-purpose ones you'll see, "for the whole family wash."

What are the special whitening ingredients in some soaps and detergents? Some of the soaps and detergents now have a fluorescent white dye added. This makes clothes look whiter in natural light, but has little effect on their appearance on a cloudy day or under artificial light. It does *not* get clothes cleaner—only makes them appear whiter.

At least one detergent has bluing added. This is also a type of dye that makes clothes *look* whiter. Blue-white looks whiter to our eyes than "white-white." Adding bluing—in liquid, bead, or flake form—to the wash does the same thing.

What's this I hear about "washing without suds"? Yes ma'am! It can be done—and *very* successfully. Some detergents form almost no suds in the wash water, but they get clothes delightfully clean. The billowy suds we've come to love can actually be culprits in the washer—keeping the machine from cleaning.

That's why the makers of many automatic washers recommend the use of nonsudsing or low-sudsing detergents. They work in wringer washers, too. Since suds can't be used to determine the amount of these detergents to use, do a little experimenting. Follow directions on the box and refer to your instruction book if you have an automatic washer.

Once you've found the right soap or detergent for the type of water you use, stick to it! Taking advantage of every sale can cause you grief. It isn't a good idea to switch back and forth from soap to synthetic detergent—they may not mix. If you've been using soap, but want to make a permanent change to detergent, "condition" your clothes first. This is done by giving the clothes two or three regular washes with nothing but softener (extra amounts) in the water. After this treatment, the clothes will be free of soap traces from previous washings. **END**

By Appointment—

....To the Queens of America's Modern Homes

Yours to Command

to SAVE WORK SAVE STEPS SAVE TIME

You'll Live Better . . . Living Majestically!

Excitingly Beautiful Styling . . . to bring new glamour into your home

Automatic Conveniences . . . as modern as tomorrow

89-year Time-Honored Majestic Reputation.

H.R.H. *Majestic Combination Range — famous for dependability . . . thrilling two fuel oven.*

Queen of them all!

Only Range that provides winter kitchen heat, yet cool, comfortable summer cooking heat. Saves the two-way cost of a separate kitchen heater and range. Models in any fuel combination you want—Electric-Coal & Wood; Gas-Coal & Wood; Electric-Oil; Gas-Oil; or Gas-Gas.

Write *now* for literature!

Majestic

Therma-Loop Automatic Electric Water Heater
5½ to 82 gallon models

Majestic

Safe Outdoor Fireman
For outdoor rubbish, trash, garbage disposal

New Majestic

Electric Range
Planned to make economical and tasteful cooking and baking practically automatic.

***Mamco**

Automatic Gas Incinerator
Burns wet or dry garbage . . . any burnable refuse.

***Mamco**

Room Air Conditioner
¼ to 1½ ton models

*MAMCO is the trademark for the New Products Division of the Majestic Manufacturing Company, St. Louis, Mo., manufacturers of cooking and heating appliances since 1865 under the famous trademark **Majestic**

Live Better . . . Live Easier . . . Enjoy the Majestic Way of Life. Ask your Majestic Dealer to Show you How!

FREE Learn How Your Majestic Home will give you more time for better living . . . Mail this coupon today for complete information.

MAJESTIC MANUFACTURING COMPANY
4552 Gustine Ave. . . St. Louis 16, Mo.

Please send me FREE complete information on

- ☐ The Majestic Electric Two-Fuel Single Oven Range
- ☐ The Majestic Gas Two-Fuel Single Oven Range
- ☐ The Majestic Electric Range
- ☐ The MAMCO Automatic Gas Incinerator
- ☐ The MAMCO Window Air Conditioner
- ☐ The Majestic *Therma-Loop* Electric Water Heater
- ☐ The Majestic *Safe Outdoor Fireman*

NAME .....

ADDRESS .....

CITY ..... STATE .....

© MM Co. 1954

Takes cooking honors second year in row

Young Mother Wins 3 Cooking Awards

Christopher Conroy is a little too young to appreciate his mother's prize ribbons, but David, Debbie and Mary certainly seem proud of them! Mrs. James Conroy of Mason City, Iowa, won the three cooking awards last fall at the North Iowa Fair.

Busy Mrs. Conroy naturally likes to find handier ways of doing things and that's why she uses Fleischmann's. "It always rises so fast," she says. "And keeps for months."

When it comes to yeast, prize-winning cooks agree . . . they prefer Fleischmann's Active Dry Yeast. Out of 9,449 prize winners surveyed, over 90% use this grand dry yeast. It's so handy . . . keeps for months on your cupboard shelf. Always rises in a hurry. Now when you bake at home it's convenient to use yeast. Just look for the Fleischmann's Active Dry Yeast label and get the finest, handiest yeast ever.

for programs, meetings

Successful Farming **FILM STRIPS**

Recipe for Color

An easy-to-use color guide for home decorating. Simple, step-by-step formula shows how to select attractive color combinations . . . perk up drab rooms and give the entire home a fresh, new appearance . . . solve other decorating problems. 33 frames in full color; 35mm. Prepared by the home decorating experts of *Successful Farming* magazine.

How to Save More Pigs

A factual film report by the editors of *Successful Farming* magazine. Packed with practical, useful ideas on disease prevention, farrowing, feeding and sanitation. Helps farmers save more young pigs, avoid profit losses! 34 frames; black and white; 35mm.

Immediately available. Send for additional information and prices, today!

Successful Farming, 1716 Locust, Des Moines 3, Iowa

Tips for

Try these ideas that and make your food

● If you like your cookies hot when you eat them, try baking them right at the table between the grids of a preheated sandwich grill. It works best with a refrigerator-cooky dough that has been sliced thin. Bake from 3 to 5 minutes.—*Mrs. Edna Wolf, Florida.*

● Substitute seasoned ground beef for your "hot dog" bun treat. Shape the ground beef to resemble a frankfurter, placing a strip of cheese in the center of each. Pan broil and serve in coney buns. —*Mrs. Ralph Thompson, Washington.*

● A good way to fix leftover beans: Shake well-drained green or yellow wax beans in a sack with corn meal until well coated; pan-fry in butter. They'll have a new taste.—*Mrs. Eddie Whalen, Iowa.*

Photographs: Stanley

● A new dessert: prepare quick-cooking tapioca according to package directions; fold in ½ cup crushed peanut brittle. Pour in sherbet glasses, chill. Serve with whipped cream and crushed peanut brittle.—*Mrs. Grant Hardy, Utah.*

the cook

add sparkle to meals
preparation simpler

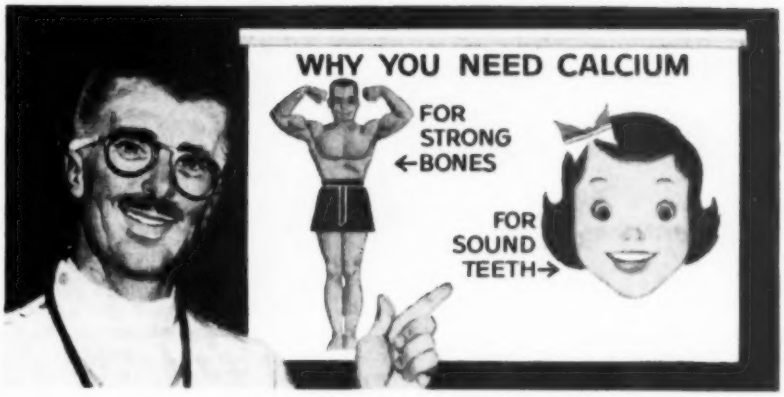
● Something different for breakfast or for a new garnish for your meat platter. Cut oranges in half and loosen segments with a sharp knife. Top each half with 1 teaspoon brown sugar, ½ teaspoon butter, and a sprinkle of nutmeg, cinnamon, and cloves. Place in a shallow pan and bake at 350° (moderate) for 25 minutes or until heated through. Place a maraschino cherry in the center. Serve hot.—*Mrs. Mabel Miller, Kansas.*

● Here's a cooky idea that makes a big hit with the youngsters: Put an animal cracker in the center of sugar-cooky dough just before baking. These cookies really go over with hungry kids just home from school. Serve them with big glasses of milk.—*Olene Kruse, Ohio.*

● Give French toast a new lease on life. Dip the bread first in the egg-and-milk mixture, then in finely crushed corn flakes. Fry as usual. Makes an extra-good breakfast treat—crisp with a nutlike flavor.—*Mrs. Mary Jean Arrington, Tennessee.*

New Post's Wheat Meal is enriched with calcium

—the mineral doctors say you may lack!



Most American families are not getting all the calcium they need according to the U.S. Department of Agriculture.

Of course, you see to it that your children drink milk daily. Yet chances are that your family's diet still does not contain *enough* calcium.

But now you can easily help give them the calcium health authorities say they need by serving new Post's Wheat Meal regularly. Just a one-ounce serving contains ⅓ your minimum daily calcium need.

And believe us, this isn't the kind of hot cereal you eat halfheartedly because you think it's good for you. This is an extra nutritious and delicious cereal, too!

Creamy smooth with a nut-like flavor

Post's Wheat Meal is a whole-wheat cereal—and so has the wonderful nutlike flavor only the whole kernel gives.

And because the wheat is ground extra fine, it's creamy smooth—in fact as smooth as any other hot cereal you can buy. Then, too, this cereal is far easier to prepare than most hot cereals.

Cooks instantly—no stirring or lumping!

You just add new Post's Wheat Meal to boiling water—let it sit for three minutes—and you serve it. There's no prolonged stirring! There's never a lump in a bowl if directions are followed. There's very little sticking to the pan.

Next time you're shopping, look for new Post's Wheat Meal in the box that says "calcium enriched." Once your family tries this hearty, wholesome cereal, they will ask for it again and again.

Product of General Foods

Copyright 1953, General Foods Corp.

Blenn, Brimm & Pasturgro help you make...

MORE

PER ACRE - PER HOUR PER ANIMAL

It's good business *to feed your high income crops BLENN and BRIMM and your pastures with PASTURGRO. These Swift's specialized crop makers bring back their cost and more besides in higher yields and better quality. So whether you raise cash crops or feed crops, they can help you make more per acre planted, more per hour worked, and more per animal fed.*

Chemically hitched growth elements

Growth elements in BLENN, BRIMM and PASTURGRO are chemically hitched by an exclusive Swift process. All ingredients are completely mixed mechanically and then completely processed chemically.

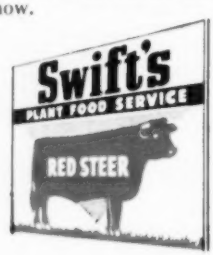
Made to meet your needs

With manufacturing plants in major crop-growing sections, Swift formulates and fortifies BLENN, BRIMM and PASTURGRO to meet the exact needs of crops grown in your area. For certain crops and soils, BLENN, in the red plaid bag, is the ideal plant food. For other crops, and different soils, BRIMM, in the yellow plaid bag, does the top job. PASTURGRO, in the green plaid bag, is made especially to feed pastures.

Consult your Authorized Swift Agent or dealer. You can rely on his advice . . . for this spring's use, be sure to place your order for BLENN, BRIMM and PASTURGRO now.

Buy at the sign of the Red Steer

RED STEER *comes in many analyses to meet the needs of your crops and soil. It is Swift's reliable plant food for general crops.*



Why sows dry up–

and what to

Substitute sow's milk still has a long way to go before replacing the sow completely on most hog farms. Some of the troubles which cropped up when substitute sow's milk was used have made us even more conscious of the value of the sow as a nursemaid.

The know-how to breed, feed, and manage sows to milk properly is one of the main marks of a good hogman. Capacity to give a lot of milk for large litters is as important in sows as high milk production is in milk cows.

Here are tested ideas on how to get and keep sows milking:

Comfortable quarters. "My sows don't seem to come to their milk right." That's what a Macon County, Illinois, farmer told me last summer. No wonder! It was July and in extremely hot weather sows often fail to come to their milk unless you provide cool farrowing quarters.

Winter weather can cause trouble, too. According to Dr. E. P. Reineke of Michigan State College, sows that farrow in extremely cold weather frequently just shiver and fail to come to their milk.

Doctor Reineke believes that sows do not milk under stress of cold, heat, or pain. The sow's adrenal glands secrete the stress hormone, *adrenalin*, under these conditions. The excess of adrenalin interferes with the secretion of pitocin, a hormone necessary to start the sow's milk flow.

Your veterinarian can give your sows a hormone shot to start them milking. It often is necessary to give 2 or 3 shots. Even then, sows will not continue to milk properly unless the cause of the sow's failure to milk is eliminated.

Photographs: Hufnagle

Feeding the right amount of the right kind of feed is important before and after the sow farrows. Article gives feeding ideas

By Dr. W. N. McMillen

do about it

It is foolish to have pigs die under a nice warm brooder while the sow fails to milk because she is shivering with cold. Sows milk best when the temperature is between 55 and 60 degrees. If the temperature is kept over 60 degrees in the farrowing house in winter, the sow's milk flow will be reduced because she tends to lose her appetite.

Farrowing-season management. By no means are all of the problems in regulating the sow's milk flow due to decreased milk flow. Overfeeding during the few days before and for a week to 10 days after farrowing will cause caked udder and often diarrhea in pigs.

Some hogmen who really do a careful job of management are able to self-feed gilts right through the farrowing season

[*Turn to page 150*

Heat lamp over the sow as well as over the protected pig area will keep the sow warm and prevent decreased milk supply

Water is probably the most neglected part of the sow's ration. Plenty of water is necessary before the sow can milk properly

In 1954...make
TOP CORN PROFITS

Your corn growing know-how plus good fertility plus Funk's G-Hybrid seed corn add up to *maximum yield and profits.*

Plant the G-Hybrids your dealer recommends—developed and improved by over 35 years of research by America's leading staff of corn breeders. More than 80 different varieties meet *every* need . . . and every G-Hybrid is *proved outstanding for high yield and 5-Star Balanced Performance* in its adapted area.

5-STAR
Balanced
PERFORMANCE
★ Rapid Growth
★ Disease Resistance
★ Insect Resistance
★ Drouth Resistance
★ Standability

SEED QUALITY EXCELLENT

Your Funk's G-Hybrid Dealer is ready now to deliver top quality seed—well matured, bright, plump. Our seed for 1954 planting carries its usual guarantee of high germination.

Because Funk's G has proved to be ***top profit corn*** . . . in 1953, American and Canadian farmers planted one million more acres to Funk's G than ever before. And in 1954, even more farmers will plant Funk's G-Hybrid . . .

Consistently Good...
...Year After Year

FUNK BROS. SEED CO.
BLOOMINGTON, ILL.
AND ASSOCIATE PRODUCERS OF FUNK'S G-HYBRIDS

Announcing...

ESTERON 99

the most important advancement to date in FARM WEED CONTROL

A new, more effective Dow 2,4-D product for better weed control at lower costs!

This latest development of Dow research is a completely new kind of 2,4-D ester weed killer for farm use. Pound for pound, ESTERON® 99 gives you better performance than any other product of its type now available.

A new concept in ester type weed killers—ESTERON 99 combines higher effectiveness against hard to kill weeds with lower costs because ESTERON 99 gives better results than old-fashioned 2,4-D ester products.

Save money this year with ESTERON 99—get better weed control and bigger yields. ESTERON 99 sprays easily in either hard or soft water and is adaptable to either low- or high-volume application equipment. It does not settle or separate out of solution—it won't freeze in storage and will not foam. Your Dow dealer has up-to-the-minute information and recommendations for ESTERON 99. See him or write for full particulars. THE DOW CHEMICAL COMPANY, Agricultural Chemical Sales Department, Midland, Michigan.

THE DOW CHEMICAL COMPANY
Dept. AC 101C, Midland, Michigan
Please send me without cost more information about ESTERON 99.

Name _____

Address _____

City _____ State _____

you can depend on DOW AGRICULTURAL CHEMICALS DOW

Why sows dry up

From page 149

by using a bulky ration. A great many swine producers who have tried this method have run into trouble with caked udders even with gilts. With older sows, it is almost impossible to full-feed during the farrowing season without getting caked udders or an oversupply of milk.

Under most conditions it is still advisable to feed a bulky ration containing some extra bran, oats, and alfalfa meal in the farrowing-season ration. It is also a good practice to gradually increase the sow's feed, taking a week or 10 days to get her back on full feed and over to a high-energy lactation ration.

A gestation ration similar to the following is commonly used today in self-feeding sows and gilts during gestation:

200 pounds corn-and-cob meal
200 pounds ground oats
200 pounds alfalfa meal
100 pounds sow-and-gilt supplement

This type of bulky ration can also be used during the farrowing season. It is necessary, however, to get the sows on a higher-energy ration by the time the pigs are a week to 10 days old.

It is better to keep pigs a little hungry the first 3 or 4 days than it is to overfeed them and produce diarrhea.

It's possible to scour pigs even after they get older. In June, several farmers around Princeton, Illinois, complained that a pig starter was scouring their pigs. In checking into the matter, it was found that the pigs were "loose" from their mothers' producing a heavy flow of milk due to lush pasture.

Several years ago, the University of Missouri found that sows give about 15 percent more milk on lush pasture than in dry lot. Fortunately, the looseness or diarrhea that comes from too much milk in older pigs on pasture is usually not harmful or long-lasting.

Disease control. Keeping disease out of the herd is an important management practice to keep sows milking. Sows that lose their pigs early from contagious abortion often have undeveloped udders and little milk. The same thing happens in case sows lose their pigs near full time from ergot and mechanical abortion.

A strict sanitation and disease-control program is necessary for maximum milk production as well as herd health.

Feeding. Sows will not milk properly unless they receive balanced rations during gestation to build up a reserve for lactation. The ration outlined earlier will do a good job, provided the sow-and-pig concentrate is well fortified with essential amino acids, vitamins A and D, B vitamins, minerals, and trace minerals.

It's important to remember that brood sows require at least twice as much feed while nursing their pigs as they do during gestation. It is also important to get the fiber out and to get the protein up from

about 12 to 14 percent to at least 15 percent during lactation. A commonly used lactation ration is:

200 pounds of corn
100 pounds of ground oats
100 pounds pig-and-sow concentrate
50 pounds alfalfa meal (optional)

Water. Sows' milk is about 85 percent water and a little pig's body is over two-thirds water. Therefore, it is important that sows and gilts have all the water they can drink. The only exception is during the first day or two after farrowing in case the sow's udder is feverish or caked. Then it is necessary to reduce the water intake.

Breeding. Many individual sows and even strains just don't give enough milk because they are not bred for high milk capacity. I have been on many farms in the Midwest where the sows and gilts were not milking properly, only to find that the sows were "beef" type instead of "milk" type. It is important to select individual sows and even families of sows from good milking mothers and strains. A sow should have at least a dozen good nipples, properly spaced.

The boar can influence how well the resulting gilts will milk. There have been many gilts with poorly developed udders sired by boars with inheritance for blind teats, only about 8 nipples, and other udder faults.

All of the practices mentioned in this article are important when it comes to keeping sows milking. Follow the ideas mentioned. You'll have healthier, faster-growing pigs. **END**

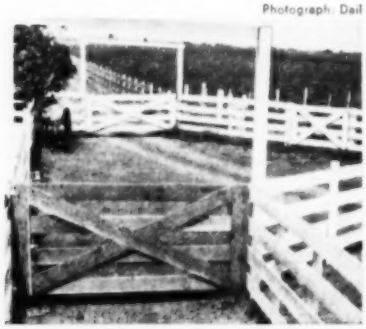
Center corral

This center corral has six gates leading into either a field, a corral, or a loading chute.

The corral simplifies collecting and distributing cattle for H. Clay Daulton, Madera County, California.

Strong swinging gates open from the loading chute and swing across the loading platform. The gates are connected to the side panels of the trucks with chains, so cattle can't get away. Each of the larger gates has high top bracing for the end posts.—*H. D., California.*

Photograph: Dail



AMERICAN FENCE
has served the Radcliffes for 35 years!

"My father used American Fence on this farm and I use it too. Some of it has been up as long as I can remember,"

reports
Guy A. Radcliffe,
R. S. #4,
Wellington, Ohio

Mr. Guy Radcliffe, pictured with his champion Belgian stud, Bobie Farceur.

On the 200-acre farm of Guy A. Radcliffe, Wellington, Ohio, you'll find lots of American Fence. Mr. Radcliffe raises corn, oats, wheat, soy beans and hay. He has 25 head of Belgian mares, and in addition, purebred Holstein heifers are raised on the Radcliffe farm. So you can see that good, strong fence is a must here . . . keeping horses and cattle in their allotted pastures, out of the crops.

Reports Mr. Radcliffe, "We never use anything but (type) 1155, #9 gauge American Fence. We use American posts because they're easy to drive."

Farmer Radcliffe offers good advice when he says, "Main thing is to get your anchor post in tight, and your braces—and your fence will *stay*."

On thousands of farms throughout the country American Fence has *proved* its staying power. This heavily galvanized fence, with its Tension Curve and Hinged Joint Construction, provides safe protection through the years, with only the minimum of maintenance. Make it "American" the next time *you* buy fence. You'll have a fence that will stay with you through rough service and the worst kind of weather.

6 favorite features of American Fence

1. Heavily Galvanized Wires. 2. Hinged Joint. 3. Tension Curve. 4. Full Gauge Wires. 5. Correct Spacing of Wires. 6. Full Length and Height.

BUILD YOUR FENCE BETTER WITH THESE FINE AMERICAN FENCE PRODUCTS . . .

U·S·S AMERICAN BARBED WIRE: Comes in a wide range of weights, in 2- and 4-point barbed wire . . . five styles to choose from. Accurately-spaced barbs, on full gauge wire, are well-formed, sharp. Wire comes neatly wound in 80-rod spools.

U·S·S AMERICAN STEEL FENCE POSTS: No holes to dig when you use these easy-to-drive posts. Slit-wing anchors road posts into ground. Comes in "T" and "U" types.

AMERICAN STEEL & WIRE DIVISION, UNITED STATES STEEL CORPORATION
GENERAL OFFICES: CLEVELAND, OHIO
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

U·S·S AMERICAN FENCE

There's more American Fence in use than any other brand!

UNITED STATES STEEL

How to borrow money

(*and how to pay it back*)

Short of fertilizer money? Being squeezed by lower prices? Here's the way to use borrowed money safely—and profitably—on your farm

By Earl Wayne

Most really successful farmers make credit work for them just as surely as their tractors work for them. Borrowing money is as often the mark of a top farmer as we used to think of it as the mark of a poor one.

Even if you don't use credit often, a good credit standing at your local bank or Production Credit Association will give you a valuable reserve source of funds through this period of uncertain prices. That lets you run a bigger farm business than you could otherwise—because you know you can borrow to handle unforeseen expenses.

Don't hesitate to borrow just because you hate to ask for a loan. Most bankers now realize that you're a customer—and really good bankers treat you like one. A good loan to you is good business for the bank. Banks make their profit by lending money and collecting interest on it.

Why borrow money? Too often we only borrow money when we get in financial difficulty. We should learn how to use credit as a tool—then bankers are easier to deal with when you do have bad luck.

Using credit as a tool means borrowing money to make money. If you can use a borrowed dollar a year and make an extra 25 cents—and it costs you only 6 cents (at 6 percent interest) to use that dollar—you're 19 cents richer.

David Hardie, a young dairy farmer of Ludlow, New York, looks at it this way: "It's penny-wise and pound-foolish to skimp on lime, fertilizer, and protein supplement—even if you don't have the cash on hand to buy it right now. You can borrow $1,000 for 6 months for $30. That's a small payment, when you consider that skimping means less profit."

There are *some* things you can make money on by borrowing, almost in spite of yourself—things like buying a better boar or bull, more fertilizer, protein supplement, better seed, insecticides, lime, more legumes, D.H.I.A. testing, and more brood sows and dairy cows.

In short, don't hesitate to borrow money if it will be profitable. On the other hand, *do* think long and hard before borrowing for groceries, furniture, or luxuries you can get along without.

How to pick a lender. Best advice is to get credit where they specialize in selling it—like your local bank, the P.C.A. office, livestock loan association, the farm representative of a life insurance company, or take a C.C.C. loan on a crib of corn. If you're too poor to get a bankable loan, go to the Farmers Home Administration office.

You want a lender who knows farming. *Don't settle for less.* Shop for credit like you shop for a new tractor or new shoes. Compare interest rates, service you get, and whether the lender is friendly. Talk to your neighbors who've had dealings with different loan people.

And watch this: Pick a lender who'll stick by you if you have a little tough luck.

How much to borrow. *Too much* borrowing can hurt as much as too little credit. It can force you to sell your pigs—before they're ready—to pay a debt.

Here's how you can figure the right amount: Borrow for the whole year's operations at one time. Take a few minutes to figure how much money you'll have to pay out and how much will come in for the year. List things you need extra money for—and how much. Then figure when you can pay back the money you want to borrow. Armed with this sheet of paper and a determined look, go talk over the whole year's money needs with your lender—and then borrow only a safe amount.

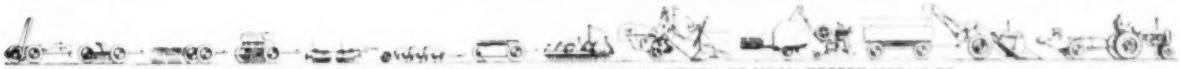
In the "safe amount" department, here's how one good Missouri farmer looks at it: "I never borrow more than 40 percent of what my livestock is worth," says Rollie Foster, of Unionville. An Illinois farmer says he got started on what he considers a firm base—one-third equity on his land, dairy cows, and machinery.

Here's one of the best ideas we ran across as we talked to farmers, loan men, and economists—you may want to try it. One farmer who does business with the Lebanon, Ohio, P.C.A. sets up a $10,000 to $12,000 loan *every* year. He has an arrangement to pay interest only on the money he uses, and for the time he uses the money. He writes drafts on the loan, like a checking account. That lets him take advantage of good buys in livestock, feed, and so on.

How to pay off. To be able to pay off the loan when it's due, keep these points in mind *when you borrow:*

- Match your repayment plan to the operation for which you're borrowing. If you borrow to buy more dairy cows you may want to [*Turn to page 154*

Making the most of MECHANIZED FARMING



BETTER MACHINES MEAN BETTER FARMING . . . TIMKEN BEARINGS MEAN BETTER MACHINES

1. NEW SUCTION MACHINE HARVESTS HARD-TO-GET GRASS SEED

A California nursery station turned the driver's seat of a tractor around, added suction machinery and produced this efficient new grass-seed harvester. Now it runs backwards, sucking up the ripe, plump seed through pick up tubes mounted on the front, formerly the "rear" of the revamped tractor. Result: percent of pure live seed in the harvest boosted from 76% to 93%, yield per acre increased. It's a good example of the new advances in mechanization that mean better farming.

Higher yields, higher production, higher profits—that's the record of mechanized farming. But it brings problems, too: machinery gets more intricate, runs faster, takes heavier loads. So more and more equipment manufacturers are using Timken® tapered roller bearings. They cut your maintenance and lubrication time, raise towing speeds, stop breakdowns. Timken bearings help you make the most of mechanized farming.

2. WE TORTURE TRACTOR BEARINGS TO BRING YOU BETTER TRACTORS

These tractor wheels bump around our special "merry-go-round" through mud and dust in a torture test of Timken bearings and seals. It's just one of the ways we work closely with tractor and implement manufacturers, making hundreds of tests of bearings, axles, wheels, transmissions, other vital parts. Tests like these help make good equipment get better.

3. DRUMS ON TRACTOR ADJUST WEIGHT, HOLD SPITTLE BUG SPRAY

To get more traction, M. H. Detwhiler of Mahoning County, Ohio used ingenuity, mounted oil drums on his tractor. To add weight he adds water, and vice versa. Drums can also hold spittle bug spray.

$10 FOR IDEAS: We'll pay $10.00 for each mechanized farming idea that we accept and publish. Send photo of implement and description to The Timken Company, Dept. SF-3, Canton 6, Ohio.

4. HERE'S THE SURE SIGN OF VALUE

When you see the label that says "Timken Bearing Equipped" you know the implement has value built into it. Timken bearings eliminate almost all friction. They reduce wear, keep moving parts in positive alignment. The Timken Roller Bearing Company, Canton 6, Ohio. Cable address: "TIMROSCO".

Tapered Roller TIMKEN BEARING EQUIPPED

This symbol on a product means its bearings are the best. Look for it when you buy.

NOT JUST A BALL NOT JUST A ROLLER THE TIMKEN TAPERED ROLLER BEARING TAKES RADIAL AND THRUST LOADS OR ANY COMBINATION

IF PETER PAIN HAS YOU ALL TIED UP WITH
CHEST COLD

FOR FAST RELIEF, rub in Ben-Gay. Contains up to 2½ times more of those two famous pain-relieving agents, methyl salicylate and menthol, than five other widely offered rub-ins!

Also for Pain due to RHEUMATISM, MUSCULAR ACHES, HEADACHES and STRAINS. Ask for Mild Ben-Gay for Children.

Copyright 1949, by Thos. Leeming & Co., Inc.

QUICK! RUB IN Ben-Gay

THE ORIGINAL BAUME ANALGÉSIQUE

Now! Amazing New Way to keep your silage fresh, green, sweet-smelling!

Now, General Chemical, 50-year leader in agricultural chemicals, brings you another great new farm aid. This time it's STA-FRESH—the handy, low-cost sodium bisulfite powder that keeps silage fresh, green and sweet-smelling.

STA-FRESH insures a superior feed with less work at lower cost. It is already highly recommended by many county agents and agricultural leaders. STA-FRESH has been used with success on alfalfa, orchard grass, brome grass, ladino, sweet clover, timothy, vetch, oats, other forage crops, also corn.

Cows prefer STA-FRESH-treated silage. In a typical free-choice test, cattle ate an average of 63 pounds of bisulfite-treated silage to 18 pounds of untreated silage.

STA-FRESH keeps silage sweet-smelling, too; rids it of that "silage stink" that fouls your clothes, smells up the barn, and may taint milk.

Get the facts on STA-FRESH right away. Your Orchard Brand dealer has it in 100-lb. bags—and complete details on how to use it. See him today.

STA-FRESH*
Silage Grade
Sodium Bisulfite

ORCHARD BRAND SPRAYS • DUSTS

GENERAL CHEMICAL DIVISION
Allied Chemical & Dye Corporation
40 Rector Street, New York 6, N. Y.

Serving Agriculture Everywhere

*General Chemical Trade-Mark

How to borrow money

From page 152

pay off in monthly payments as milk checks come in. Make a feeder cattle loan come due *after* you plan to sell the cattle—and a fertilizer loan *after* the corn is harvested and sold.

- Then when the corn or cattle are sold, pay off immediately. If you wait until later, you may find you've spent part of the money for something else.
- Some farmers borrow for machinery—then do lots of custom work for a year or two to get the loan paid off fast.
- Spend the money for the purpose for which it was borrowed. Then, if it was a good loan, your repayment prospects are good.

How to handle lenders. A book could be written on the "care and feeding" of bankers. They sometimes seem as hard to handle as a new bunch of steers. They ask a lot of questions and may seem nosy. But you would be, too, if you had a bank examiner looking over your shoulder. You can keep them happier and make your borrowing easier by following a few simple pointers.

One is this: Visit with lenders well ahead of time. If you have to get a loan in a hurry, you usually pay a higher rate of interest. Also, for faster service, file an income statement and a list of what you own and what you owe.

Keep this fact in mind: You build a credit rating by borrowing money—*and* paying it back. It may pay you to borrow money occasionally even if you don't really need it—so the lender can see how you're coming along.

Your best assurance of a good credit rating is a good operating record. A Kansas banker urges that you start your sons on the way to building a credit rating by having them borrow for their 4-H and F.F.A. projects.

A. I. Rauch, a Holdrege, Nebraska, banker, advises that you go to the lender with a definite program in mind. Tell him what you want the money for and for how long—and tell about your farm, your equipment, and how you plan to repay the loan.

And if you need some extra time to hit a better market, or if you get in a tough spot, tell the lender *before the note comes due*. That way you can work something out. You're in trouble if you let the note come due and make the lender come to you to see what happened.

We're right at the start of a new growing season now. Check over your needs and put your credit to work for you this summer. It's good business. END

Do you plan to move?

If you are going to move, please let us know five weeks beforehand if possible. Send your change of address to *Successful Farming*, Des Moines 3, Iowa, giving both your *old* and *new* addresses. This will help prevent your missing an issue.

Let Hudson Help with your Poultry Chores!

Efficient, Low Cost help with
HUDSON CAREFREE FEEDERS, FOUNTAINS, BROODERS.
Save you time and money . . . give you better chicks!

GAS, ELECTRIC, OR OIL BROODERS

A. Hudson-Hart® Gas Brooder. Self-cleaning burner. Clay radiants spread heat uniformly. Sensitive valve, automatic thermostat. 500, 750, 1000 chicks.

B. Hudson Lektrik-Hen® Brooder. Completely automatic. Powerful radiant elements. Balanced heat distribution keeps litter dry, prevents huddling. Fully insulated. 100, 300, 500 chicks.

C. Hudson Mother-Hen® Oil Brooder. Save up to 30% on fuel with "Oil-Miser" burner. Needs no cleaning between broods. Micro-Tem® valve gives constant heat control. 500, 750 chicks.

D. Single-Lamp Infra-Red Brooder. Ideal for small broods of chicks, for pigs, lambs, and other jobs needing temporary, auxiliary heat. With protecting guard, as shown.

E. 3- and 4-Lamp Infra-Red Brooders. 4-Lamp model with guard as shown, or without guard, has thermostat control on 2 lamps; handles about 300 chicks, 3-lamp model handles about 250 chicks.

F. 6-Lamp Infra-Red Brooder. Will brood about 500 chicks. Thermostat control on 3 lamps. 48-in. heavy-gauge metal fixture for 6 lamps. Many other uses on the farm to provide auxiliary heat. Complete with guard, as shown.

FAMOUS HUDSON KLEEN-EZY® FEEDERS

A. Round Chick Feeder. For starting baby chicks. 8 holes. 2 color.

B. Slide-Top Chick Feeders. 14, 22, 30 hole sizes. 1 piece 2-color enamelled steel—no seams or cracks.

C. Hudson Chick Feeder. One-piece enamelled steel. No seams, easy to clean. 3 sizes: 18-in., 24-in., 36-in. with non-roost reels.

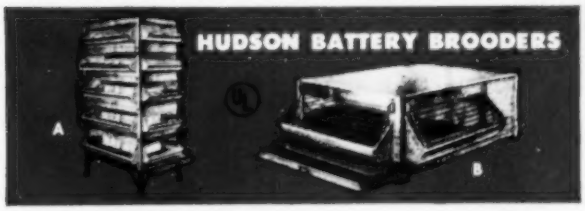
D. Adjustable Chick Feeders. Hudson-designed legs easily snap to 3 heights—no nuts or bolts. 4-blade non-roost, free-spinning, 3-position strong reels. 36-in., 48-in. sizes.

E. Large Adjustable Broiler Feeder. 48-in. with reel adjustable to 3 positions, or with grill. Legs snap easily into any of 3 positions.

F. Jumbo Size Broiler Feeders. 5 ft. long with grill or with non-roost reel. Adjustable legs fold under trough or stand upright.

G. Hanging Feeder. Holds about 45 lbs. Pan adjustable to 3 positions.

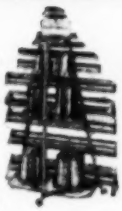
HUDSON BATTERY BROODERS



A. Hudson Lektrik-Hen® Battery. Available in 2 sizes—with 1 to 5 decks (123 or 247 chicks per deck). Stack perfectly. 150-watt element.

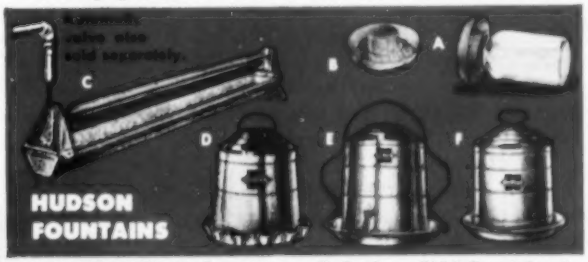
B. Hudson Lektrik-Chik® Brooder. Full size—moderately priced. Holds 123 day-old chicks. Stacks perfectly to make 2 to 5 deck battery. 150-watt element.

The Dealer with this Display has a Complete Stock



© H.D.H. MFG. CO. 1954

HUDSON FOUNTAINS



A. Spill Not® Plastic Base. Shuts off water if tipped over . . . litter won't get soaked. Durable, non-corroding, green plastic. For any liquids. For qt., 2-qt., 1-gal. glass jars.

B. Slide-On Plastic Base. Durable, green, non-corroding plastic. For any liquids. For qt. or 2-qt. jars.

C. Trough Waterer. Foolproof, automatic valve lets water flow as needed. 4-qt. capacity for 500 chicks.

D. Sanitary Chick Fountains. Individual cups in pan keep chicks from wading in water. 1 or 2 gals.

E. Growing, Flock Fountains. Special saucer pan prevents wading. Easy to clean, fill, and carry. Can be used as pail. 3 or 5 gals.

F. Double Wall Fountains. No gushing or overflow. Special pan prevents wading, keeps water clean. Ruggedly built. 3, 5, 8 gals.

*Trade Mark

A. Roto-Vent®. With revolving turbine head. **B. Revolving Head** Ventilator. Both freeze-proof, bird-proof. Galvanized steel. 12- or 18-in. flue.

SIGN OF THE BEST BUY
HUDSON
Tested and Proved
POULTRY EQUIPMENT

H. D. HUDSON MANUFACTURING CO.
589 E. Illinois Street, Chicago 11, Illinois

KOHLER
PLUMBING FIXTURES

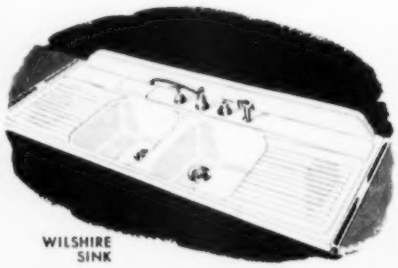
First quality

When you build or remodel, you can afford Kohler quality in fixtures and fittings. Kohler fixtures are made in a wide range of styles and sizes to meet any space or budget requirement. All bear the Kohler mark of value, and provide the economy of long satisfactory service.

The Cosmopolitan Bath of enameled, non-flexing iron, has a useful bench, flat bottom, comfortable slope end. The Gramercy vitreous china lavatory has a handy shelf, two soap dishes and a generous basin. The chromium-plated mixer fittings match the fixtures in style and quality.

The Wilshire sink, of acid-resisting enameled iron, has two roomy basins and two drainboards, a full-length shelf, two Duostrainers, a mixer faucet with swing spout and hose spray.

Consult your Kohler dealer. Write for folder G-8.


WILSHIRE
SINK

Kohler Co., Kohler, Wisconsin. Established 1873

KOHLER OF KOHLER

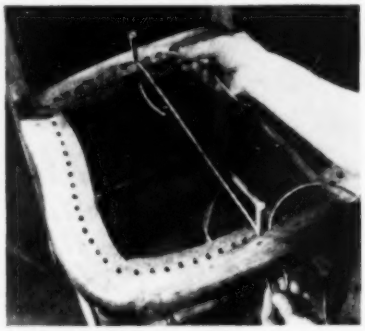
PLUMBING FIXTURES • HEATING EQUIPMENT • ELECTRIC PLANTS
AIR-COOLED ENGINES • PRECISION CONTROLS

Save that chair–

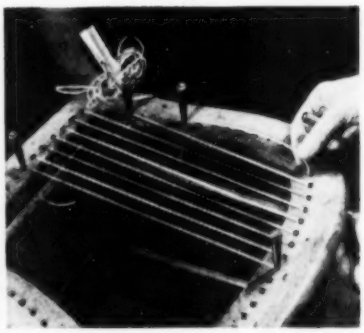
Recane it

Most of us have an old chair or two in the family which would make interesting and valuable seating space with the addition of a new cane seat. Instead of sending your chair out to have it recaned, why not do it yourself and save money for other projects? The following steps, as taken from Cornell Extension Bulletin 681, "Cane Seats for Chairs," by Ruth B. Comstock, will show you how this can be done.

If the chair needs refinishing, painting, or any repairs, do this before starting to cane. Save the old seat for a guide and buy your cane—same size as the original—at a hobby shop. Dampen the cane slightly to make it pliable for weaving, and always keep the shiny side up.

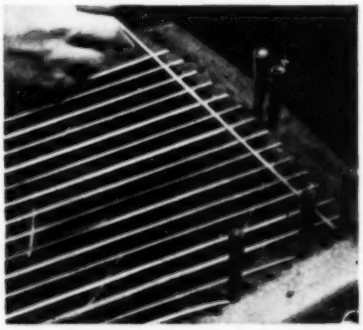


1 Start at holes nearest the center back and front; secure the end of the first strand in first hole with a peg and thread the cane from back to front across the seat, filling in one side. Repeat procedure with another strand on other side

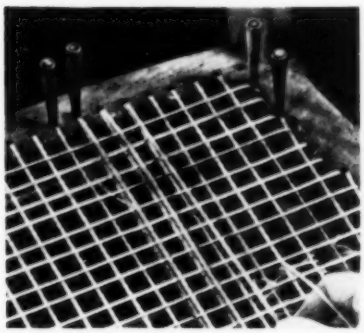


2 For a seat wider at the front than at the back, weave the wider section with a separate piece of cane. Do not use corner holes unless you are sure there will be room for diagonal and binder cane which must also go through these holes

yourself

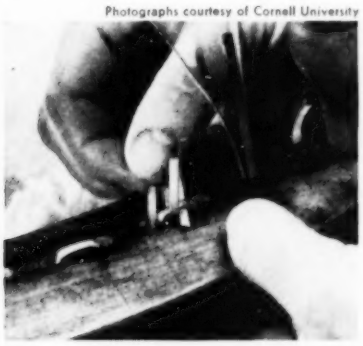


3 Start the cross strand at the back on the right side rail (as you face the chair) in a hole next to the corner. Weave in the crosswise direction, filling in the entire seat with one section of cane and keeping it on top of the first strand



4 Weave the third strand as in Step 1, but to the right of the first strand and over the previous two rows. Keep the caning as straight as possible as you go along and with the same degree of slackness. The cane will tighten up as it dries

Photographs courtesy of Cornell University



5 Fasten the cane ends on the underside of the frame wherever you can as you go along so the pegs will not be in your way. Twist the end around the nearest cane stitch on the underside of the seat frame. Trim ends of the strands to about ¼ inch

More on page 158

WITH GOLD BOND FIREPROOF GYPSUM WALLBOARD!"

"WHEN Joe's Mother came to live with us we needed an extra bedroom badly. And we found it in the attic! Our Gold Bond lumber and building material dealer showed us how we could add a beautiful new room with Gold Bond fireproof Gypsum Wallboard.

We were surprised how little time it took. One of those big panels covers as much as 48 square feet. Yet they're easy to handle and you don't have to "baby" those new hard edges—they don't damage like ordinary wallboard.

Gold Bond Gypsum Wallboard cuts and nails-up easier than wood. We made a beautiful smooth finish right over the joints with the Gold Bond Tape Joint Kit (available from your dealer). Finally, we decorated with Gold Bond Velvet, the new latex-base paint that just seems to glide on. It dries so quickly without that painty smell.

We're so happy with the results, my husband's planning an office and workshop, and I can't wait to get at the kitchen."

NATIONAL GYPSUM COMPANY, BUFFALO 2, NEW YORK

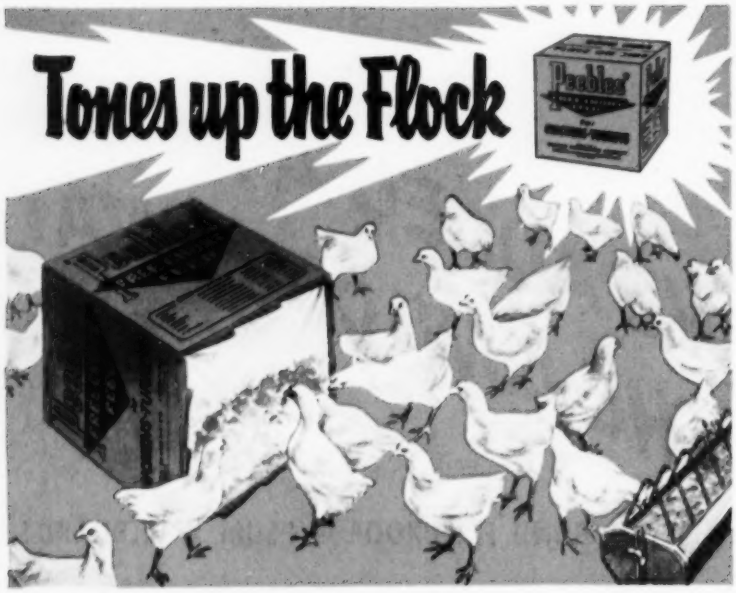
You'll build or remodel better with **Gold Bond**®

NATIONAL GYPSUM CO., Dept. SF-34, Buffalo 2, N. Y.
Please send me a free copy of your Gypsum Wallboard Application Instruction Folder.

NAME .....

ADDRESS .....

CITY ..... COUNTY ..... STATE .....



Peebles' perks up appetites after medication, supplies the Whey Factor for extra grow power

PEEBLES' is a daily flock conditioner and a natural appetizer. It's rich in whey nutrients that help keep birds eating in damp, chilly weather . . . and throughout periods of medication. Wards off costly setbacks. Peebles' tones digestive tracts in a *natural* way. Promotes good intestinal hygiene. Builds resistance to disease.

Peebles' is packed with low-cost grow power, too. It supplies high concentrations of the important Whey Factor . . . plus egg-building milk minerals, protein and vitamins. Feed Peebles' now. Profit from healthier chicks, faster growth, better feathering. ***Write Appleton, Wis., for free folder B-3: "The Whey Factor Adds Grow Power"***

GIVES LOW-COST "MILK FED" RESULTS

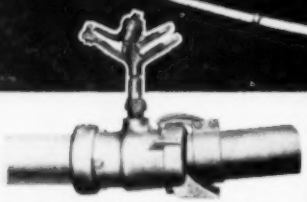
Peebles

FREE CHOICE FEED

WESTERN CONDENSING COMPANY
Appleton, Wis. • Petaluma, Calif.
World's Largest Producer of Whey Products

HELPFUL SUGGESTIONS for solving all types of farm problems are found in each issue of *Successful Farming.*

Successful Farming's *practical, up-to-the-minute information will help you and your family enjoy better farm living.*



Easy to connect pipe. Push ends together and they lock. Make water tight seal.

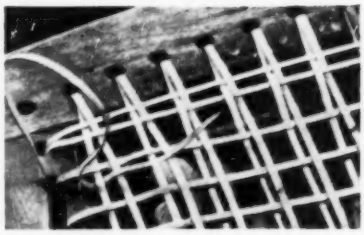
Improve quality and yield any year. Water an acre or a square mile quickly and easily with OK Champion Sprinkler Irrigation—the "Quality and Pioneer Line." Quick connecting, water-tight couplings. Couple and uncouple pipe from standing position—no stooping. Entire system quickly repays cost. Makes extra profit for years.

Send for FREE Circular—Champion Corporation, 4777 Sheffield Ave., Hammond, Ind.

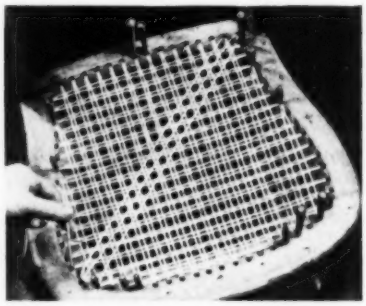
OK CHAMPION *Irrigation Systems* Layout Plans FREE

Recane it yourself

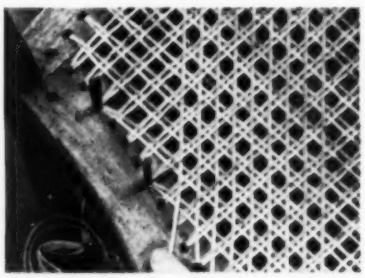
From page 157



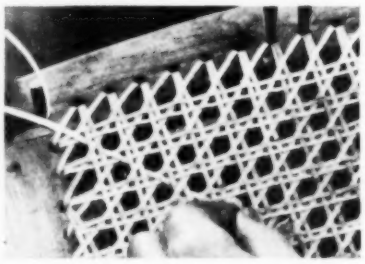
6 Real weaving begins with the fourth strand which follows the same direction as the second but goes over the cane on top (third strand) and under the first strand. Cut cane wherever necessary to avoid blocking holes. Fasten as in Step 5



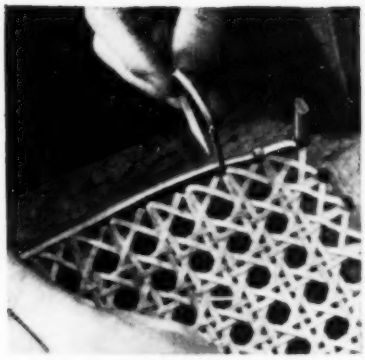
7 Start diagonal weaving at back right corner and toward front left corner. The cane goes over pairs running from front to back and under those running from side to side. Weave back section of seat first, using a second strand for front section



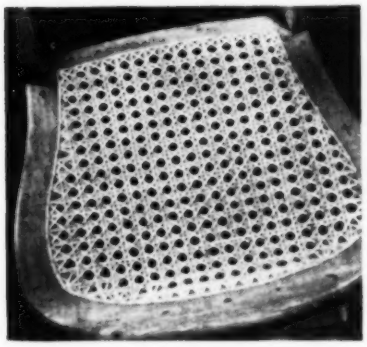
8 In order to keep rows as even as possible, weave two canes in corner holes as shown in Picture 7. If there are more holes on the sides than on the back—skip holes occasionally to come out even



9 The second diagonal starts at back left corner and goes toward the front right corner. Weave under pairs that run from front to back and over those from side to side. Weave twice through the holes you skipped with the first diagonal and skip all the holes you have used twice before



10 Fasten all cane ends as shown in Step 5. To finish right side of seat, apply a binder. Use cane one size wider than used on rest of chair. To apply, lay one strand flat across holes, then use a narrower weaving strand to come up from each hole and over binder to keep it in place



11 The dry cane should be tight and level with seat frame. To blend color of a new cane seat with older seats, apply mixture of waterproof varnish containing a sealer, ½ as much turpentine as varnish, and a little burnt umber. Rub in with fingers and wipe off the surplus

---

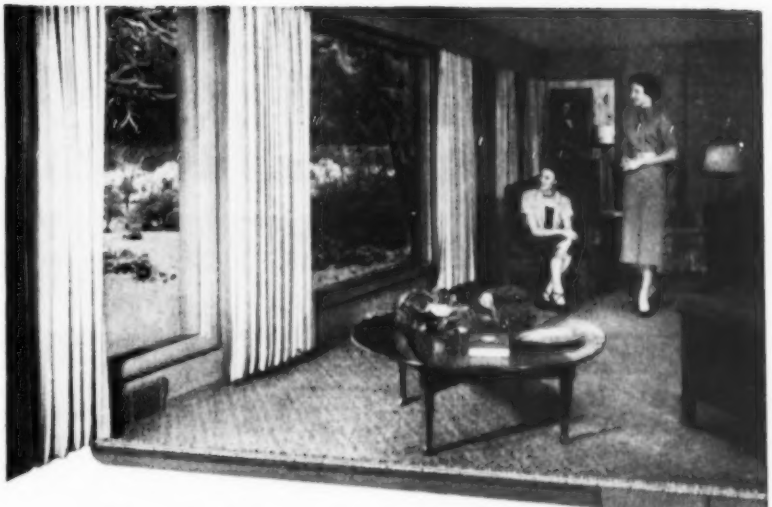
Bulletin 681 on caning may be had at the Home Economics College, Cornell University, Ithaca, New York. Send 5 cents if you live outside of New York State.

Seasons

Which the more beautiful—who
can say?
Spring green preluding a new
year's stay?
The lushful bloom speaking
Summer's name,
From a blue-white flag to a
trumpet's flame?
Autumn who yawns in gold light
and weaves
A lazy dream under drifting leaves?
Majestic Winter who knows no
fear—
Till God says gently that spring
is near . . . ?

Which the loveliest—who can deny
That each new season claims,
"It is I!"

— *Ila R. Monday*



For truly modern heating

IRON FIREMAN

is your ***best buy***

Here's Why: Iron Fireman heating equipment is packed with extra values that you can't see at a glance, so let's take a close look.

FIRST, THE FIRE. It must heat *fast*. If an intense radiant fire is not produced within the first critical half minute you will be robbed of both fuel and comfort. The purpose of this quick heat is to give you steady, even warmth without fuel waste. A sensitive thermostat, with short, frequent firing cycles, prevents stratification of air and cold floors.

Iron Fireman gives you this fast heating fire in both the oil and gas fired models. The radiant Vortex is a *different* kind of oil burner, with whirling, bowl-shaped flame over a heat reflecting hearth. The Radiant gas burner releases intense radiant heat (from natural, LP and all types of fuel gas) on the same principle as an incandescent gas mantle. Both oil and gas units are outstanding fuel savers.

DEPENDABILITY is a matter of built-in quality throughout that pays off in extra years of trouble-free service. Such quality features as electrically welded, one piece, gas tight furnace body; fast heating furnaces to prevent condensation and corrosion (rusting out); oiled-for-life bearings on motors and fans; and finer materials throughout.

Dollar for dollar, Iron Fireman is your best buy.

Winter air conditioner in highboy and lowboy models and wide range of sizes. Warms, cleans, humidifies and circulates the air. Gas or oil fired.

Horizontal suspension oil furnace with forced air circulation. Stows away in attic, or crawlway, or hangs overhead in garage, basement or utility room.

Iron Fireman quick heating boilers are available in many sizes for all types of steam and hot water heating systems. For gas or oil firing.

Iron Fireman

Finest in heating

OIL • GAS • COAL

Iron Fireman Radiant gas burner is the most economical for gas conversion. Same principle as a gas mantle, producing intense, efficient *radiant* heat.

IRON FIREMAN MANUFACTURING CO.
3015 West 106th Street, Cleveland 11, Ohio.

Please send free book "12 Plans for Home Heating and Air Conditioning."

Name _____

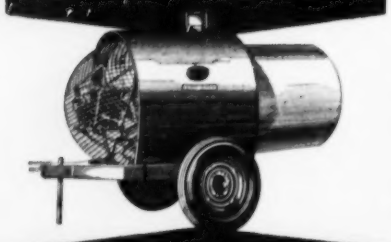
Address _____

City _____ State _____

Iron Fireman Coal Flow stoker feeds coal direct from bin to furnace. No coal shoveling. Fully automatic heat with coal, the most abundant fuel.

The famous Iron Fireman Vortex oil conversion burner has a *radiant*, whirling bowl-shaped flame with heat reflecting hearth. Noted for fuel saving.

Hartzell Power Speeds Drying...



Saves You Money

A Hartzell crop drier packs the punch for a fast drying job. The powerful Hartzell unit forces the heated air into the heart of your batch drier, bin or mow. And that's what it takes to insure fast, complete drying. Faster drying saves time, saves fuel. Hartzell power puts money in your pocket.

Compact. Sturdy. Easily portable. Completely automatic. Three sizes—3, 5 and 7½ h.p. And the Hartzell drier comes as a complete package. No extras to buy. See your dealer or write today for details.

HARTZELL propeller fan co.

Agricultural Division Dept. S **PIQUA, OHIO**

PIONEER WORK SAVERS
NOW BETTER THAN EVER—GREAT NEW 1954
SHAW "DU-ALL"
GARDEN AND SMALL FARM TRACTORS

Plow . . Cultivate . . Mow . . Rake . . Bulldoze . . Saw Wood..Make Many Other Hard Jobs Easy

Sturdy 1½ to 5 H.P. Walking Tractor

Best for all around garden and lawn work. Variable speeds, adjustable wheel widths, individual gang tool controls. 3 speed and reverse automotive gears on 3 and 5 H.P. machines. Superb traction, deep plowing, easy handling. All wanted tools and attachments

Rugged, Low Cost, 2½, 5, 8 H.P. Streamliner

Powerful, practical, streamlined, comfortable. Pulls 8, 10, 12 inch plows, cultivates between 38 inch rows, bulldozes, mows lawns, operates belt attachments. 3 speeds and reverse automotive transmission. Friction brakes. ¾ to 7 MPH. Nothing else like it in a tractor that will get the work done

ALSO powerful 8 and 12 H.P. high clearance riding tractors with 3 speeds and reverse automotive gears. Handle 10, 12, 14 inch plows.

See the Shaw Dealer. Write direct for FREE CATALOG, complete Shaw line.

SHAW MANUFACTURING CO.
4803 Front St., Galesburg, Kansas
668-M N. 4th St., Columbus, Ohio

FLEX-BEAM FORKS BY UNION

unbreakable where other forks break
The Union Fork & Hoe Co.
Columbus 15, Ohio

How we took the cover

Here's what happened when we went to the Leisy farm to take our picture

Photographs: Reynolds, Photograhpy, Inc.

Mr. and Mrs. Leisy (right) greet Betty Fisk, home furnishings editor, and Photographer Warren Reynolds as they arrive

By Betty Fisk

Last September when we visited the August Leisy farm near Wisner, Nebraska, to photograph their living room for our cover, Mrs. Leisy asked us why we didn't tell our readers all the details that go into making a photograph and writing a story. We agreed it would be fun to take you behind the scenes and tell you how we took our cover.

It all began last July when we were looking for farm homes in Nebraska. We heard that the Leisys had redecorated their living room with the help of Mrs. G. Harlan Kennedy, decorator at Orchard & Wilhelm in Omaha. An appointment was made and we drove out to the farm. What a wonderful job they'd done in solving a window and furniture arrangement problem! Here were good ideas to pass along to our readers.

A date was made to return in September with a professional photographer. In the meantime from snapshots we worked out the final details with the art director for angles, color, and action. Since it was to be in color, the flowers had to be selected to fit into the color scheme—they also had to be flowers that would be blooming in March!

Good photographs don't happen—it takes lots of special lights and equipment to make them that way. That's why the station wagon is so loaded with equipment! Camera set up, we look in the lens to get the picture composed as we planned it. Then come the little details—like using gummed tape to hold the draperies in even folds, or moving a table at a different angle so it will look centered. What may look right to the eye looks different in a camera.

Betty selects the right-colored dress for Mrs. Leisy to wear in photograph. Dark-red one will fit into the color scheme best

It takes hours of planning and work for every picture you see in the magazine. It's a lot of work, but it's a lot of fun and our farm folks seem to enjoy it just as much as we do. **END**

ARCADIAN® 12-12-12

The MODERN *Fertilizer*

Now you get new money-making advantages in ARCADIAN 12-12-12, the modern, labor-saving fertilizer that fits the plant-food needs of many crops. This granulated, free-flowing, concentrated fertilizer is chemically blended into firm, dry, non-dusting pellets, each one of which is a complete 12-12-12 plant food. Every crop root nourished by these pellets gets this balanced ratio of nitrogen, phosphorus and potash.

Arcadian®

12-12-12
GRANULATED FERTILIZER

ARCADIAN 12-12-12 provides far more concentration of plant food than ordinary fertilizers. There's no filler in it—it's packed full of growing power. And you save on freight charges, on hauling and handling. You get better payloads in any kind of fertilizer spreader.

Rich in nitrogen, the growth element, ARCADIAN 12-12-12 contains both quick-acting nitrate for prompt feeding, and long-lasting ammonia to feed your crop through the season.

As a yield-booster, ARCADIAN 12-12-12 is an excellent fertilizer for corn, for small grains, for truck crops and for fruit and other crops. Ask your county agent or extension agronomist.

***SEE** your fertilizer dealer today for ARCADIAN 12-12-12 in easy-to-lift 80-pound bags. Get your order in now for prompt delivery when you need it.*

NITROGEN DIVISION Allied Chemical & Dye Corporation
P.O. Box 98, Ironton, Ohio. Telephone: Ironton 8-4366

NITROGEN DIVISION ALLIED CHEMICAL

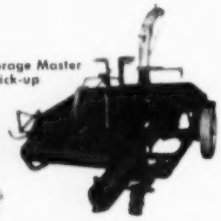
SUMMER PASTURE ALL WINTER

FOX

The Pioneer Grass Silage Harvester with Mower Bar Unit.

Many Fox users claim they feed twice as many cattle per acre since changing from pasture to green feeding. As usual, Fox, the oldest name in forage harvesters, is pioneering the way to bigger profits by this new method of feeding. One man with the Fox, equipped with mower bar unit, can mow and chop enough green forage for a large herd of cattle in a few minutes.

Fox has a very interesting 16mm. film in full color, with sound, on "Green Feeding." We will be glad to send it to any county agent, grange or any farmer group who cares to show it. Write for information and the name of your nearest Fox dealer.



The Fox Forage Master with the Pick-up Unit.

The Fox ensilage harvester with row crop unit.

Write for free copy of "The History Of Modern Forage Harvesting."

FOX RIVER TRACTOR CO.

The Pioneer of Modern Forage Harvesting

334 NORTH RANKIN STREET

APPLETON FOX WISCONSIN

Soils and crops

They seed easier, faster with these seeders

Fast and easy—that's the way farmers owning the machines shown below seed oats and grass. Both seeders were built in farm shops, mostly from spare parts.

D. C. Gunderson, Pocahontas County, Iowa, farmer, made the supersize seeder (top picture) to broadcast oats and grass seed at the same time. He needed a big, fast seeder to put in his 600 acres of oats.

Gunderson cut an old storage tank in two parts to make the oats tanks. The grass seed is carried in the old oil drum behind the tractor seat. Gunderson fills the oats tanks from an overhead bin.

Photograph: Hull

Big grain-forage seeder has a 60-bushel capacity for oats, and a 30-gallon drum for clover seed. Seeds up to 25 acres an hour

Geiser

Mounted legume-grass seeder costs only 25 cents for materials, plus labor. Old brake cable connects seeder, power take-off

Oats and grass seed feed into the endgate-seeder hopper by gravity.

The small grass seeder (lower picture) was made by Ralph McFarren, Gosport, Indiana. A flexible brake cable connects the seeder fan with the power take off. The grass-seed hopper is an old 5-gallon oilcan. Other parts are remains of an old endgate seeder.

Sweet-clover weevils attack alfalfa, too

Sweet-clover weevils sometimes destroy alfalfa seedings in Minnesota's Red River Valley.

The weevils emerge out of nearby plowed-down sweet-clover crops and walk into adjacent alfalfa fields. B. A. Haws, University of Minnesota entomologist, says the weevils are forced to migrate for food when the sweet clover is plowed under.

No other reports have come in about weevils attacking alfalfa in other states, but Entomologist Haws suggests that if you have an alfalfa seeding adjacent to sweet clover you'll plow this spring, you might keep an eye open for them in the alfalfa. Use ½ pound dieldrin or ½ pound heptachlor for control.

• • • •

Aldrin stops wireworms in potato fields

Applying 2 to 3 pounds of 25-percent aldrin before planting potatoes will control wireworms, say Michigan State College entomologists.

Mineral soils require 2 pounds of aldrin per acre. Muck requires 3 pounds of aldrin per acre for good control. Flavor of the potatoes won't be affected and the chemical has been approved by the federal government for use on potatoes.

• • • •

Fertilizing nurse crop helps hay following it

Dr. Ray L. Cook, Michigan State soils scientist, says fertilizer may help hay yields as long as 3 or 4 years after it is applied on the grain. Alfalfa and clover crops both have consistently been increased from fertilizer on preceding grain, in Michigan tests.

Soil tests are the best way to tell you how much fertilizer to apply, says Doctor Cook.

• • • •

Cattle used to reseed pastures

A test from Vermont shows it's possible to reseed pasture by spreading seed in manure.

In Vermont, inoculated red clover, alfalfa, and trefoil were sprinkled on manure in the gutter—about a pint of seed per ton. The manure was spread on frozen timothy sod in early March. Good stands of all the legumes were established.

In California they tried it on rough

range land. One to $1\frac{1}{2}$ pounds of rose clover seed was fed to beef cattle with each 100 pounds of concentrate. About 10 seeds showed up in each dropping. The stand was spotty. Germination was good but permanent establishment was poor. They found that moving feed bunks helped get better distribution of the seed fed to the cattle.

• • • •

High-analysis fertilizers call for more lime

When you buy a 12-12-24 instead of the 4-8-8 fertilizer you used in the past, you will need to keep a closer check on your soil pH.

A 10-year test just completed in New Jersey showed that high-analysis fertilizers, applied on an equivalent basis with 1 ton of 4-8-8 per acre, did this to the soil: lowered the pH, increased the acidity, and lowered the available calcium and magnesium.

The higher the analysis, according to the New Jersey study, the more lime is needed to bring up the deficiencies in calcium and magnesium. These elements, along with other minor elements, usually are cut down when actual nitrogen, phosphorus, and potash are increased to make a high analysis.

• • • •

Do soil-saving overfall structures hold up?

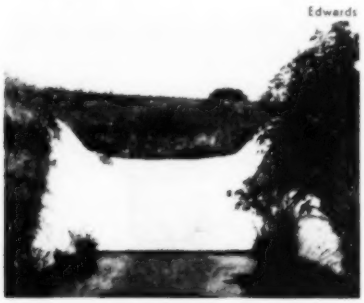
Yes—if you use good cement, build them at least 4 inches thick, and give them the right curvatures (see the photograph below).

Agricultural engineers at the University of Missouri examined 131 of these soil-conserving "spillways" recently. They found structures 15 years old that were built of good cement 4 inches or more in thickness still in good condition. Many of them will be good for another decade of service.

Here are other facts the surveyors found:

- The sides need to be curved into the floors to prevent cracking.
- Structures more than 10 feet wide many times showed signs of failing.
- Overfalls more than 7 feet high led to cracking.

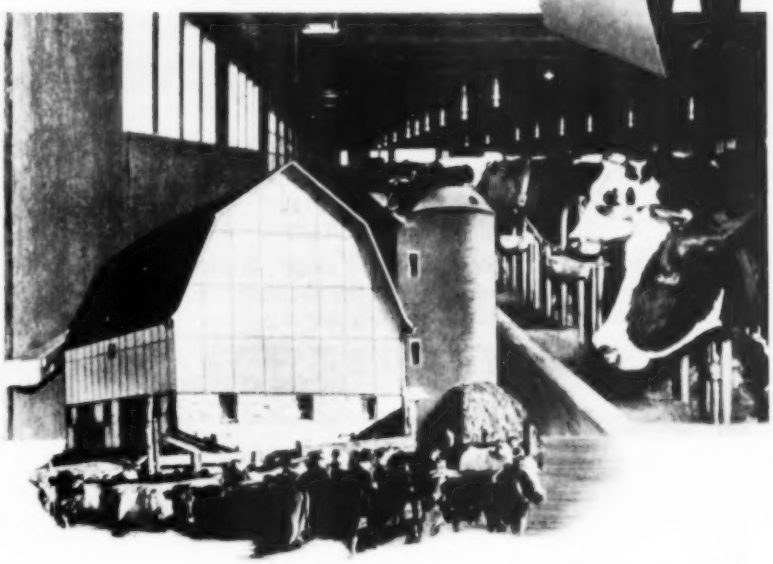
Edwards



Above is a typical, well-built overfall structure that has given good service. It is located below a grass waterway.

Asbestos Flexboard

the fireproof, rotproof board for use inside and out!



Strong and tough, it looks and wears like stone, handles and works like wood!

Johns-Manville Asbestos Flexboard* answers a thousand building needs for the farm. It builds safe, sanitary interiors and weatherproof exteriors. One man can easily handle the large 4′ x 8′ sheets. They can be nailed without drilling, and worked with ordinary tools. No other material combines all its advantages.

Made of asbestos and cement, Flexboard can't rot, rust, or burn. The smooth, gray stonelike surface needs no other finish. Once in place, it is ready for years of maintenance-free service.

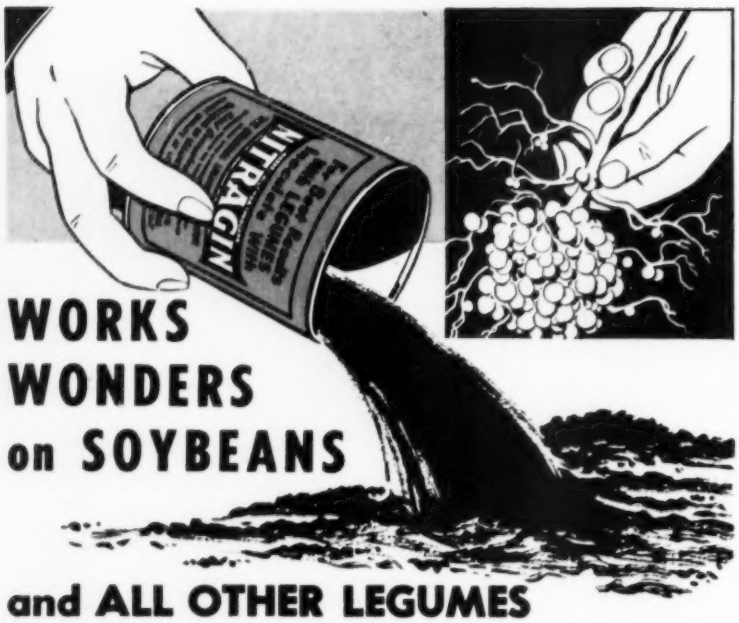
*Reg. U. S. Pat. Off.

Free Send coupon for a free booklet showing how Flexboard will protect your buildings, save upkeep!

Johns-Manville, Dept. SF-3, Box 60, New York 16, N.Y.
(In Canada, send to 199 Bay St., Toronto 1, Ont.)
Send free booklet about Flexboard for my farm.

Name_____
Address_____
City_____ County_____ State_____

JOHNS-MANVILLE JM PRODUCTS **Johns-Manville**



WORKS WONDERS on SOYBEANS

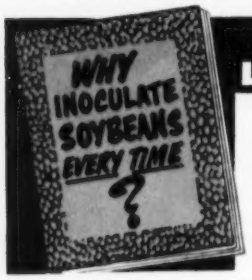
and ALL OTHER LEGUMES

Boosts Soybean Yield and Quality
NITRAGIN on soybean seed helps plants get much of their nitrogen from the air for better growth. Saves soil nitrogen.

Benefits Your Land
Improved tilth and fertility often show up for years after in bigger crops, richer pasture, better and cheaper livestock production. Inoculated legumes are famous soil-improvers.

Apply in 2 Minutes per Acre
Only takes a couple of minutes and a dime's worth of NITRAGIN to inoculate soybean seed for an acre. Inoculate every planting. Don't skip this low-cost high-paying practice.

Get Nitragin from Your Seedsman
Look for the date and bacteria-count guarantee on the orange NITRAGIN can. They show what you're getting.



DON'T COUNT ON LEFTOVER BACTERIA

Depending on soybean bacteria left in the soil by previous crop can cost you money. New illustrated booklet cites experiment station results. Send postcard to The Nitragin Co., 3113 W. Custer Ave., Milwaukee 9, Wis. for your free copy.

Decorating advice. Stores offering *Successful Farming's* home planning service are listed on page 182. Visit store nearest you for help with decorating problems.

Wheelhorse
Makes gardening easier — adds to your leisure!

FREE Catalog! Send Postcard today!

Only $149.50 2 h.p. model

You'll buy a Wheelhorse when you compare price . . . construction . . . design and ease of handling! Easy to change attachments help you plow, cultivate, harrow, haul, spray, mow, saw, cut, roll, plow snow. Guaranteed! 2, 2½, 3 and 3½ h.p. models. Write!

POND COMPANY
2643-G3 Dixie Way North, South Bend 17, Ind.

Dealerships Available! Write Today!

Keep *Successful Farming* coming your way. Each month in *Successful Farming*, you will find the kind of information that will help you increase your profits, make your farm work more convenient, and your farm living more comfortable.

Fast, Easy SEEDING for field or lawn

$1.60 from your dealer or sent postpaid.

Ideal for sowing smooth seeds, and pellet fertilizers. Also manufacturers of Cyclone hand and power driven seed sowers.

THE CYCLONE SEEDER CO., INC.
Urbana 7, Indiana

Green-lot feeding

From page 60

I give ½ of the gain to the corn and protein supplement. On that basis, each acre of pasture produced *only 219 pounds of gain*," Bernard continued.

"It cost us $2.47 a ton to chop, haul, and feed the green forage. The cattle ate from 40 to 60 pounds daily. I figure we harvested close to 318 tons of green chopped feed from the 22 acres of alfalfa-brome. It cost us $35.81 per acre for harvesting and feeding," Bernard said.

Bernard's figures show that he got 583 pounds *more* gain per acre by green-lot feeding instead of pasturing. Each pound of gain was estimated to be worth 20 cents. On this basis, 583 pounds of gain at 20 cents per pound figures out to be $117.60. It cost $35.81 per acre for harvesting, hauling, and feeding. This amount, subtracted from $117.60, would leave a balance of $81.79 per acre *in favor of green-lot* feeding over pasturing.

Charles Bretschneider and sons, Edwin and Clarence, of Ludington, Michigan, stopped sending their 64 head of Holstein cows and heifers to pasture 2 years ago. They follow the green-lot system instead.

In 1952, 20 acres of Sudan grass were harvested twice, and 6 acres of alfalfa, Ladino, and bromegrass were harvested once. In addition, 9 acres of oats-stubble clover were harvested once. All this feed was fed in dry lot.

The cows were fed all of the green chopped feed they would clean up in two feedings per day. In the barn, the cows were fed 1 pound of 13-percent protein-grain concentrate per 7 pounds of milk. At night, the cows ate about 7 pounds of hay per head.

Production per cow on this system of feeding was very good, averaging 458 pounds of butterfat. With 26 out of the 40 milk cows only 2- and 3-year-olds, this record of production is very good.

The Bretschneiders figure twice as much feed from the first cutting by chopping rather than pasturing. And they get a second cutting of 2 tons of baled hay per acre.

These dairymen say their pastured meadows lasted two years, but they believe that with green-lot feeding, the meadows will last indefinitely if well fertilized.

Chopped forage is fed from June 15 until corn is ready for silage. Some corn is also chopped and fed direct.

On this farm, the chopper is pulled with a crawler tractor. The forage is raked with a side delivery immediately after mowing and chopped from the windrow into a wagon. The chopped grass is pitched from the wagon into the feed bunks by hand. Although this involves somewhat more labor than chopping direct from the stem and using a self-unloading wagon, these dairymen are well satisfied with the system. They don't intend to go back to grazing their cattle.

Using this system, unfenced pasture

can be used. The Bretschneider farm is in two tracts. Forage from the more-distant land can be used the same as that from the main farm. There's no driving cows to and from pasture, and no need for a water supply in each field. There has been no bloat with this system.

Early in 1952, Peter Peerbolte, Jr., Howe, Indiana, decided to try the green-lot-feeding idea—and now says he won't *ever* go back to pasture.

Peerbolte fed chopped grass to 87 head of 575-pound cattle from May 15 to November 15, except for a period of 30 days when the cattle got chopped corn which was in the silage-making stage.

The cattle ate the chopped forage from 60 acres of alfalfa, clover, and bromegrass, plus 15 acres of sudan. In addition, a neighbor fed 65 head of 450-pound cattle with chopped forage from these same acres for 30 days. Thirty acres of alfalfa, Ladino, and bromegrass were harvested by chopper a second time.

Purdue beef-cattle supplement A was fed to the cattle at the rate of 3½ pounds per animal per day for 4 months, May through August. The last of the chopped forage was supplemented with 5 pounds of ground ear corn per head.

The cattle were all sold by Thanksgiving Day at an average weight of 950 pounds. The gain was 385 pounds, or an average of about 2 pounds per day.

Dale Fitzgerrell, of Wilton Junction, Iowa, hauled chopped alfalfa-brome to his dairy cattle last year. Fourteen acres furnished plenty of good, succulent roughage for 48 head of Holstein cows for 92 days during June, July, and August. Dale said he had no trouble with bloat and was able to cut the amount of grain fed by ⅓ *without* reducing the milk flow.

"Feeding high-quality chopped legume-grass roughage, either fresh or as silage, is the surest way I know of to cut milk-production costs," said Dale.

After visits with a great number of farmers about green-lot feeding, it now appears that this practice is really here to stay. If you have either beef or dairy cattle, and a forage chopper, why not give this practice a try? Farmers who have used the system say you can't beat it. **END**

SUCCESSFUL FARMING

"There's nothing I can do. He put money in the meter."

"RILCO RAFTERS ERECTED IN 2½ Hours"

*Price based on first quality materials, and will vary according to locality.

THE WYNVEEN FAMILY...
Marvin and his two boys

Designed for labor-saving after erection, too, Marvin Wynveen's Type 50 Poultry House is 24' x 42' in size, fully insulated. 7' x 7' door and post free interior permits easy access for tractor and spreader. Building is covered with shiplap, paper, shingles. Dropping boards hinged for easy cleaning.

● "Anyone who can handle a level and square can put up this building. We had our Rilco Rafters assembled and erected in 2½ hours. We like the appearance of our Rilco Poultry House, its sturdy construction, its spaciousness."

So says Marvin Wynveen, Baldwin, Wisconsin, in speaking of his Type 50 Poultry House.

Ease and speed of erection is a mighty big factor in determining overall costs of any farm building. That's why Rilco construction means tremendous savings. Rilco Glued Laminated Rafters are precision cut, drilled, ready to erect without cutting or fitting. Actually, when you build the Rilco way the job's half done before you start! Whether it's a barn, machine shed, crib and granary or any other modern farm building... Rilco Rafters will help you build better, faster, for less!

"You Can't Beat RILCO CONSTRUCTION"

Building shown is a Type 50 Barn 36' x 60' with roomy, ample storage loft. It is used on the Doyen farm to house 300 hogs.

SAYS RAY DOYEN, GOOD THUNDER, MINN.

"Rilco's laminated construction gives me the solid barn I like. There are a lot of Rilco buildings in this neighborhood. Every one has stood up." Take a tip from farmers who know! Ask your lumber dealer about Rilco... now!

RILCO GLUED LAMINATED RAFTERS

For your protection and convenience, sold only through your local lumber dealer.

RILCO LAMINATED PRODUCTS, INC.
2504 First National Bank Bldg.
St. Paul 1, Minnesota

Please send new free Rilco Barn Catalog and information on the following farm buildings:

☐ Two-Story Barns ☐ Machine Sheds
☐ One-Story Barns ☐ Hog and Poultry Houses

Name _____
Address _____
Town _____ *State* _____

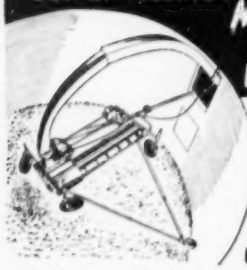
Be your own home repair and improvement expert

Now you can be a handyman in your own home. You can actually save money by doing your home repair jobs and improvements yourself. *Better Homes & Gardens* gives you the book that shows you how—*Better Homes & Gardens* Handyman's Book. The actual procedure is shown for every job in this 480-page handsomely bound volume. All you have to do is follow the step-by-step pictures on each page and see it done while you do it yourself. Get your copy today!

Better Homes & Gardens Handyman's Book only **$3.95**

TAKE THE FORKING OUT OF FEEDING...

McLEAN SILO UNLOADER



GIVES PUSH-BUTTON FEEDING AT A PRICE YOU CAN AFFORD

Feed silage the easy way with the McLean Silo Unloader. Delivers up to 6 tons of silage per hour. Has automatic de-icer. Fits any tower silo . . . no suspension . . . adaptable to all sizes. Fully field tested . . . hundreds in use. *Unconditionally guaranteed. Write . . .*

SILAGE EQUIPMENT, INC.
701 E. MURDOCK • WICHITA, KANSAS

LIME • FERTILIZER • SEED
BROADCASTER

SAVE $100

SOLD DIRECT FACTORY TO YOU!

SIZES 3-14 FT.

FREIGHT PREPAID

Sturdy, low cost Broadcaster saves real money. Modern assembly and Direct Factory-To-You Plan. Saves over $100 per machine. Famous quality, long lasting construction. Has special hitch. No clog agitator. Instant shut-off. Precision flow control for accurate spreading or seeding. Exact spreading 50 to 8000 lbs. per acre. Sizes 3 to 14 ft. Special sizes for small riding tractors and garden tractors. Over 14,000 now working in 48 states. Absolute Iron-Clad Guarantee. Act now.

AS LOW AS $66

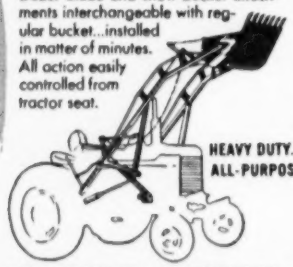
Send for FREE Booklet

MOORE MANUFACTURING CO.
SWEDESBORO 37E, N. J.

NEW MEYER
Hydraulic Power Loader

For Row Crop, Conversion, Ford & Ferguson Type Tractors

Digs, moves, lifts up to one ton! Dozer blade and snow bucket attachments interchangeable with regular bucket...installed in matter of minutes. All action easily controlled from tractor seat.



HEAVY DUTY... ALL-PURPOSE

LOW PRICES! Write for FREE folder.

MEYER MFG. CO.
BOX 666 MORTON, ILLINOIS

MAKERS OF FAMOUS MEYER ELEVATORS

More editorial material is devoted to Dairy articles in Successful Farming than in any other major farm magazine. Write for classified advertising details.

ONE-MAN SAWMILL LOW AS $50.00 DOWN

Take BELSAW Portable Sawmill right to the trees — turn out valuable lumber for home and farm — sell to local yards — make up to $50 a day custom sawing for neighbors. BELSAW lasts a lifetime. No crew needed. Power with tractor or auto engine. Beginners get excellent results. Send today for FREE BOOK, "HOW TO MAKE LUMBER".

FREE BOOK

BELSAW MACHINERY CO
8108 Field Bldg., Kansas City 11, Mo.

For lots of food-storage room,

both cool and freezing,

Build a walk-in

By Jan Maple

"The only thing wrong with our freezer (or refrigerator) is that it's too *small*." Have you ever said that? More and more farm families are considering the addition of a walk-in refrigerator-freezer combination—one they can't outgrow.

If you're building a new home, or planning some remodeling, find out if a walk-in unit would be practical for you. On most farms where most of the food is home-grown, or where garden produce, poultry, or dairy products are prepared for market, a walk-in cooler and freezer could be a means of increasing profits.

The cost of such a unit can be kept reasonably lower if you have building materials on hand, and if you can do most of the work yourself. Because the sizes and types vary so much, it's impos-

[*Turn to page 168*

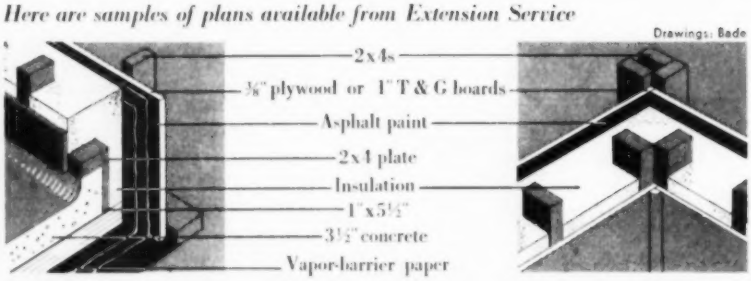
Photographs: Allen, Dearborn-Massar

Cutaway model walk-in at Purdue University has 250-cubic-foot chill room for fresh produce (35-38 degrees), and 100-cubic-foot freezer (zero degrees) for freezing all poultry, meats, vegetables, and fruits

This walk-in refrigerator with a large ▶ reach-in freezer inside of it adjoins the kitchen area in the A. W. Kleinholtz farm home near Pullman, Washington. Refrigerator room is for fruits and eggs

Here are samples of plans available from Extension Service

Drawings: Bade



Floor and wall detail of walk-in refrigerator of freezer. The vapor barrier is 2 layers of a vapor-proof building paper

Corner-wall detail of walk-in. Construction shown is in addition to the existing or newly built housing to contain freezer

Farm Problems?

Sure! But to the Millions Who Wear

WOLVERINE *SHELL* HORSEHIDES

Work Shoe Comfort and Extra Wear Is No Problem At All – *NEVER HAS BEEN!*

No Other Work Shoes In The World Like Them At Any Price!

NEVER? Well, certainly not since Wolverine's famous triple tanning process was perfected nearly 50 years ago. It tans the comfort of buckskin-softness right into genuine shell horsehide without sacrificing one bit of its natural wear defying toughness. Enjoy this matchless combination of comfort and long wear economy. Over 27,000 dealers across the nation carry *Wolverine Shell Horsehides*. If you don't know the one nearest to you, write for his name today.

WOLVERINE SHOE & TANNING CORP.
ROCKFORD, MICHIGAN

A NEW PAIR Free

IF THEY DRY OUT HARD OR STIFF

When Dried Out Under Average Warm Room Temperatures

See That Shell?

Shell is a tough substance much like your thumbnail—it's the center layer of Nature's only 3-ply hide and grows only over the horse's hip. Fibers are vertical—not horizontal as in other leathers.

So the wear is on the fiber ends as in a butcher's block and that's why this amazingly tough leather wears so much longer. Only Wolverine tans it buckskin soft to DRY OUT SOFT.

How Ferguson gains weight for big jobs

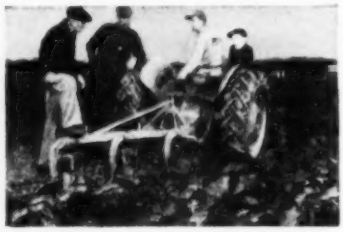
Ferguson System Implements actually become part of the Ferguson Tractor . . . through a simple, 3-point linkage and unique, built-in hydraulic controls. As a result, resistance of the soil against ground-engaging tools is put to work for you, adding weight to the tractor, as needed, to produce more traction.

When soil resistance increases in heavier soils, the tractor automatically gains hundreds of pounds of extra traction weight through the Ferguson System. As resistance decreases, traction weight is lessened.

Right there's where Ferguson is different! Different even from other 3-point hookups and hydraulic systems. It's how the compact Ferguson "30" can pull three bottoms with ease in most soils . . . probably *yours!*

But when the going is easy, as it is on *most* farm jobs, the Ferguson System doesn't waste fuel on excess built-in weight.

If it's hard for you to see how the low-cost Ferguson has the power and weight for *your* big jobs, we can understand why. All we ask is that you read the offer below, and take advantage of it *today.*



To get a sample of Ferguson System farming: print your name and address in the margin of this ad and mail it to: Ferguson, Racine, Wisconsin. We'll have an expert report to your farm to give you a generous sample of the Ferguson "30" doing your big jobs. *Write today!*

YOU'LL SEE MORE AND MORE OF THE

Ferguson "30"

SEE YOUR FERGUSON DEALER FIRST!

Build a walk-in

From page 166

sible to give an accurate cost estimate. A rough figure is about $1 per square foot of exterior surface.

The walk-in can be made of wood, concrete, brick, hollow tile, or other types of masonry. The mechanism must be bought from a manufacturer. It's best to buy commercially built walk-in doors, too. (Your county agent or local power supplier can tell you where to buy them.)

One advantage of a walk-in is that it can be built to fit almost any available space. The handiest location is in a utility room having work space for preparing the foods to be chilled or frozen. It will save most steps to have it near the kitchen, too. A separate building outside the house may be a satisfactory location. A basement is not desirable because of dampness and the necessity of climbing steps with large loads of foodstuffs.

You can plan a walk-in unit to suit yourself. Both those shown in our photographs have large walk-in chill rooms (refrigerators). One has a walk-in freezer, the other a reach-in freezer. Both these freezers can be reached only by walking into the refrigerator. The unit can be constructed so the freezer door opens directly into the room instead of inside the refrigerator. This is more convenient,

> **One of the best things in the world is to be a boy; it requires no experience, but needs some practice to be a good one.**
> —*Charles Dudley Warner*

and no more costly. Another idea is to make part of the walk-in refrigerator accessible to the kitchen by having a small reach-in door on the side.

There is no standard size for either the refrigerator or freezer section of a walk-in —you plan each to fit your needs. The chilling room (35-38 degrees)—used for aging meats before freezing, storing garden produce, eggs and cream—may be 100 to 600 cubic feet, or larger. The freezing section (zero degrees) may be from 25 to 100 cubic feet—you should plan about 10 cubic feet of frozen-food storage for each member of your family.

It's advisable to install two separate refrigerating units for the refrigerator and freezer section. The separate units are simpler, and in case of trouble with one, the other can go on operating.

The size of the compressors needed will depend, of course, on the capacity of the walk-in, type of insulation and other factors. You should get competent help on this from the company supplying your cooling apparatus.

A walk-in freezer-refrigerator combination up to about 300 cubic feet (total) will probably use about 200 kilowatt hours per month. **END**

FOR TROUBLE-FREE OPERATION

Of Your Farm Machinery

Stop BELT SLIPPAGE With

PULMORE

LIQUID BELT TREATMENT

Why put up with equipment that only half works because of belt-slippage trouble? Use PULMORE Liquid Belt Treatment and increase traction 200% to 500%—Get full work from seed cleaners, grain mixers, feed grinders and other machinery. Ask your dealer for PULMORE! Write for free illustrated circular!

BELTRACTION COMPANY

1815 W. Winona St. • Chicago 40, Ill.

Business firms—write Successful Farming for details about classified advertising.

HOBBS

Engine Hour

METERS

APPROVED BY LEADING MANUFACTURERS *FOR LONGER TRACTOR LIFE*

Installed as original equipment and recommended as an approved accessory, the Hobbs Engine Hour Meter is a true timing instrument that records HOURS and MINUTES of tractor operation . . . tells you exactly *when* to service your powered equipment. Operates off battery.

Timed maintenance helps you prevent breakdowns . . . prolongs equipment life . . . prevents needless repairs. Fully guaranteed. See your dealer or write —

ORIGINATED AND MANUFACTURED EXCLUSIVELY BY

John W. Hobbs Corporation

2059 YALE BLVD. SPRINGFIELD, ILLINOIS

Successful Farming devotes more editorial pages to livestock and poultry material than any other major farm magazine. Write for classified advertising details.

MEYER *Bale* LOADER

SAVE MANPOWER THIS LOW COST WAY

Saves extra labor—does more work than 2 hired hands! Loads 75 bales in 15 minutes. Picks them up just as dropped, straightens them automatically. Saves baler, too—no strain or breakage pulling skids or wagons. Ground driven, light draft, easily hitched. Two models - bale deck heights 6'9" and 10'9".

Free! *Write for descriptive literature and prices Today!*

MEYER MFG. CO., BOX 1360, MORTON, ILLINOIS

MAKERS OF FAMOUS MEYER ELEVATORS

***Successful Farming*'s Furniture Arrangement Kit shows how to**

Plan a room on paper

Photograph: Hopkins

Tired of pushing furniture around the room to find the arrangement you like best in your home? Save your back and your nerves and plan your arrangement on paper first. This is the easiest and simplest way to do it.

Successful Farming offers you a complete Furniture Arrangement Kit (pictured above) to help you. It contains complete instructions for using, giving you a list of rules and principles to guide you in finding the best arrangement to suit your way of living. There are several sheets of graph paper scaled ¼ inch to 1 foot for drawing the plan of your room, and to show door, window, and fireplace placement. Also included is a page of furniture cutouts for every room in your home.

All you do is draw the plan of your room to scale, cut out the pieces of furniture to correspond to the ones you have, or plan to buy, and arrange them on your room plan. This way you can see if the sofa will fit and look good in a certain spot before you strain muscles to move it!

Paper planning will help you if you're buying new furniture. You can see before you buy if it will fit into the space you have. Furniture in a store looks smaller than it will look in your home. So, before you buy, take the measurements, find the cutout that closely matches it, and try it on your plan to see if it will fit.

If you're building a new home, try arranging the furniture cutouts on your blueprints. This will show you if your furniture will fit your new home.

If you have a furniture arrangement problem, order one of these kits. *Send 25 cents to Successful Farming, 1803 Meredith Building, Des Moines 3, Iowa, or go to one of the stores listed on page 183.*

Send Your OLD Rugs, Clothing...Get Rich NEW OLSON RUGS Like these

SAVE up to ½ Your Rug Money

It's EASY . . It's like MAGIC

No matter where you live, ***Write Today*** for beautiful, FREE, *80th Anniversary* Olson Rug and Decorating Book in full colors. Tells how the valuable wools and materials in discarded rugs, clothing, etc., are reclaimed like new, sterilized, shredded, pickered, bleached, merged, blended with choice new wools, then redyed, respun into rug yarn, and woven in *A Week* into deep-textured, new, Reversible . .

BROADLOOM RUGS

. . fine enough for any home. *Double the Wear.* **Choice** of 52 patterns regardless of colors in your material, any size.

Solid Colors	Tweed Blends
Floral, Leaf	Early American
Embossed	Oriental Designs
effects	Lovely Ovals

No Risk, Trial Offer. Send materials at Our Expense from any state. Satisfaction guaranteed. Over 3 million customers. Factory-to-you! We do not have agents or sell thru stores.

--- Mail Coupon or Postcard for ---

FREE RUG AND DECORATING BOOK IN FULL COLORS

Name .....

Address ..... OFEC

Town ..... State .....

OLSON RUG CO. Dept. P-10, Chicago 41, ILL.

FREE VEGETABLE GARDEN GUIDE

Write for free garden guide and bargain Plant offers—tells how to grow EARLY VEGETABLES—Cabbage, Onion, Lettuce, Broccoli, Cauliflower, Collard, Tomato, Potato, Egg Plant, Pepper Plants described with cultural directions. Special early order bonus.

PIEDMONT PLANT CO., BOX 867-N, ALBANY, GA.

It's wonderful the way Chewing-Gum Laxative

acts chiefly to REMOVE WASTE *—NOT* GOOD FOOD

Here's the secret millions of folks have discovered about FEEN-A-MINT, the modern chewing-gum laxative. Yes, here is why FEEN-A-MINT is so wonderfully different.

FEEN-A-MINT is different because you **chew** it. It's different, too, because it **removes mostly waste—not good food!**

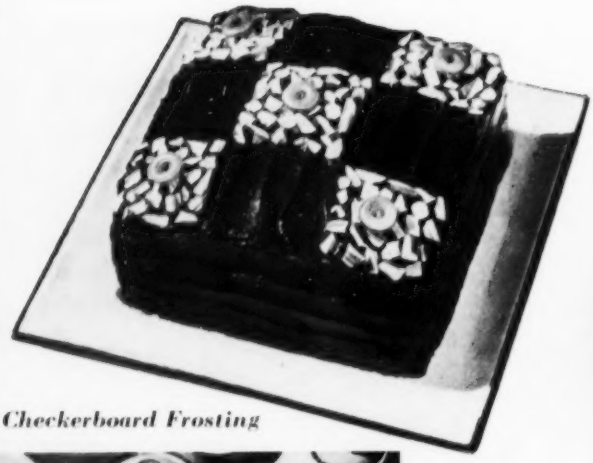
You see, FEEN-A-MINT **does not** work in the stomach, where food is being digested. That's why it **does not** take away a lot of the good food you need for energy.

Doctors know that FEEN-A-MINT works chiefly in the **lower bowel . . . removes mostly waste, not good food!**

So to feel like a million, do as millions do. **Chew** delicious FEEN-A-MINT . . . and feel full of life and energy! Get FEEN-A-MINT!

Feen-a-mint

THE CHEWING-GUM LAXATIVE



Checkerboard Frosting

Polka-dot Frosting

Whirligig Frosting

Frostings . . .

six of the best

A good cake deserves the best—and these frostings are just that. Most of them are de luxe editions of old specialties. Add a favorite candy for a simple and good-to-eat touch that requires no special tricks or skills. The candies we used are the kind you can buy anywhere (gumdrops, corn candy, peanut brittle, peppermint sticks, chocolate nonpareils). Complete directions for decorating each cake are included with the recipes. Decorating with candy and these good frostings is so easy and so much fun that your youngsters will want to try their hands at it, too.

Recipes on page 172

Lucky Day Frosting

Photographs: Stanley

Cupcake Medley

Lazy Daisy Frosting

The man in step with progress

HOME-TOWN TELEPHONE TEAM—Guy Douglass, telephone manager at Buckhannon, West Virginia, and Lorna Linger, chief operator, discuss the day's work. A pet project of Guy's is helping operators be extra helpful and efficient in handling urgent calls for busy farmers.

MAN ON THE TRACTOR is Robert Phillips, State Director of the Farm Bureau. He and Guy take a big interest in this community and often get together to trade useful ideas. Guy dropped by to tell him about the new telephone cable planned for the Kanawha area and what it'll mean to several farm communities.

"GOOD FROM THE GROUND UP" Guy tells John Post, well-known breeder of polled Herefords. Post is explaining, in turn, how the telephone often puts him in touch with a prospective buyer for his livestock. He agrees telephone improvements and expansion hereabouts are a boon to the farms.

"DRIVE THE STAKE"—Guy likes to get out in the field and help with the job. Here he's staking out a branch lead to a rural line. Telephones have tripled in this area in the fifteen years he's been manager.

• Guy Douglass and thousands more like him are the backbone of the telephone development program in Bell rural areas. They supply the ingenuity, enthusiasm, and hard work that keep the telephone in step with farm progress. BELL TELEPHONE SYSTEM

Believe what you See about Hand Lotions

It's one thing to make a claim, but quite another to prove it. Famous CHAMBERLAIN'S LOTION *gives you visible* PROOF *of how rapidly it penetrates your skin, soothing delicate tissues.*

MAKE THE PENETRATION TEST AND PROVE IT TO YOURSELF!

Place a cleansing tissue over each of two glasses. Pour a small amount of the lotion you now use on the tissue covering one glass. Pour the same amount of CHAMBERLAIN'S LOTION on the other tissue. See how Chamberlain's soaks completely through the tissue — just as it does into your skin.

Chamberlain's LOTION

. . . Makes your hands feel good — look good, too, even after using harsh, irritating detergents.

Here's why CHAMBERLAIN'S LOTION *penetrates and soothes chapped, rough skin faster, more effectively.* CHAMBERLAIN'S LOTION *is enlarished with a superabundance of Glycerine, the costly ingredient that soothes and softens. It contains 2 to 4 times more Glycerine than other leading hand lotions.* CHAMBERLAIN'S *is never sticky. It dries almost instantly. Start using* CHAMBERLAIN'S LOTION *today. Buy it at your nearby drug store or cosmetic counter.*

Send for travel-size bottle today. Enclose 10c for handling and postage to Chamberlain Sales Corp., Des Moines 9, Iowa.

Hospital Tests Prove

MUSTEROLE®

gives HIGH-SPEED relief from muscular

ACHES, PAINS STIFFNESS

–Also Greater Ease in Moving!

If you suffer agonizing pains from arthritis—rub on Musterole. Hospital tests PROVE that Musterole gives high-speed relief from pain—also greater ease in moving.

Musterole's highly stimulating, pain-relieving medication creates needed *concentrated heat* right where you rub it. It brings amazing relief. You can actually FEEL Musterole working to bring you prompt long-lasting comfort.

Musterole also promptly relieves

torturing pains of rheumatism, lumbago, neuritis—it's great to limber up sore, stiff aching muscles.

Note: If your pain is intense—buy Extra Strong Musterole.

Frostings

From page 170

Lazy Daisy Frosting

(*Orange Butter Frosting*)

(Enough to frost two 8-inch layers)

¼ cup butter
2 cups sifted confectioners' sugar
2 egg yolks
Grated peel of 1 orange
1 tablespoon orange juice

Thoroughly cream butter and sugar. Stir in unbeaten egg yolks and grated orange peel. Add orange juice as frosting becomes thick. Frost cake as usual. Decorate with corn candy to make a flower arrangement. Center each flower with a semisweet chocolate piece.

Whirligig Frosting

(*Caramel Frosting*)

(Enough to frost two 8-inch layers)

½ cup butter
1 cup brown sugar
¼ cup milk
3½ cups sifted confectioners' sugar

Melt butter; add brown sugar. Cook about 1 minute or until slightly thick, stirring constantly. Cool slightly; add milk. Add confectioners' sugar and beat until of spreading consistency. Frosting may seem thin at first, it thickens as it cools. Frost cake as usual. Arrange crushed peanut brittle in a whirligig on top of cake; arrange around sides of cake, also.

Lucky Day Frosting

(*Boiled Frosting*)

(Enough to frost two 9-inch layers)

2 cups sugar
¾ cup water
1 tablespoon light corn syrup
Dash of salt
2 stiff-beaten egg whites
1 teaspoon vanilla

Cook sugar, water, corn syrup, and salt over low heat, stirring until sugar dissolves. Cover saucepan 2 to 3 minutes to dissolve sugar crystals on sides of pan. Uncover, cook to 236°. Gradually add hot syrup to beaten egg whites, beating constantly. Add vanilla; continue beating until frosting is of spreading consistency. Frost cake as usual. Arrange small green gumdrops to form five 4-leaf clovers on top of cake. Cut stems from long, green gumdrops.

Cupcake Medley

(*Quick Uncooked Frosting*)

(Frosts about 12 cupcakes)

1 egg white
¾ cup sugar
¼ teaspoon cream of tartar
1 teaspoon vanilla
¼ cup boiling water

Mix together egg white, sugar, cream of tartar, and vanilla. Add boiling water and beat with electric mixer or rotary beater for about 5 minutes or until frosting stands in stiff peaks and is of spreading consistency. Swirl tops of cupcakes with frosting. Then let your imagination take over. Use colored sugar, decorettes, gumdrops, semisweet chocolate pieces, corn candy.

Polka-dot Frosting (*Chocolate Whip*)
(Enough to frost a 10-inch tube cake)

½ cup cocoa
½ cup sugar
1½ cups heavy cream

Add cocoa and sugar to heavy cream. Chill for 1 hour in refrigerator. Beat until stiff. Frost cake as usual. Stand pairs of chocolate nonpareils around top edge of cake. Arrange more pairs of chocolate nonpareils around bottom edge.

Checkerboard Frosting
(*Chocolate Satin Frosting*)
(Enough to frost two 8-inch squares)

1½ cups sifted confectioners' sugar
2 tablespoons hot water
3 squares unsweetened chocolate, melted
1 slightly beaten egg
4 tablespoons softened butter
¼ teaspoon rum extract

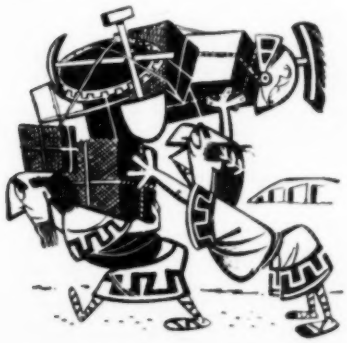
Blend sugar, hot water, and half of egg with chocolate. Then beat in remaining egg. Beat in butter, 1 tablespoon at a time. Blend in extract. Place over ice water and beat until of spreading consistency. Frost cake as usual. Divide top of cake in squares by running knife lightly through frosting. Arrange crushed peppermint stick candy in alternate squares to make a checkerboard. Top candy squares with hard cherry-candy circles.

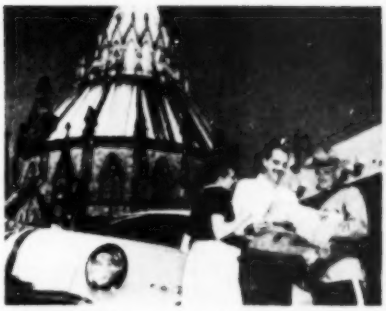
Pioneer—

Why you say it

A term applied to early settlers of the Midwest originated among European military units of an early period. Some fighting men rode horses, some walked. Cooks, paymasters, doctors, and surgeons accompanied Roman armies.

Among the Franks, a special corps went ahead of the army to prepare camp sites. A fighting man did not have to carry his luggage or level a spot for his tent. Such chores were turned over to the *paonier*, who walked ahead of the troops carrying his spade and pickaxe. By the 16th century, the old army term was being applied to any sort of "advance laborer." English modified the spelling to *pioneer*, and applied it to any person who leads the way for others.—*Boyd G. Wood.*





EXPLORE picturesque cities and ancient, historic towns . . . shop for unusual handicrafts and imported goods.

FIND new friends and good times at comfortable, carefree resorts in nature's most gorgeous mountain, lake or coastal settings.

This year: **Canada!**

VACATIONS UNLIMITED

FISH AND CAMP IN GREAT NATIONAL PARKS . . . ADVENTURE INTO THE SPLENDOUR OF VAST AND VIVID LAKELANDS

This is the holidayland that's so refreshingly new and different . . . yet so conveniently near. Here you can enjoy a truly memorable vacation on a limited budget of travel dollars and days — and you choose from Canada's inviting variety the scenes, the sports, the type of relaxation that suits *you*. No passport, no elaborate preparations needed — just pack and come. See your travel or transportation agent soon; send the coupon now.

Get this beautiful Free Book!

01-5-08-54-02
CANADIAN GOVERNMENT TRAVEL BUREAU, OTTAWA, CANADA

Please send your 48-page, full-colour book on vacation attractions in all parts of Canada . . . . . ☐
Tell me where 16 mm sound films on Canadian travel subjects are available in the U.S.A. . . . . ☐
Check ✓ as required

Name _____
PLEASE PRINT
Address _____
Town _____ State _____

Saves More in a Year Than it Costs You to Buy!

THE Jayhawk HYDRAULIC LOADER

Models for Both Row Crop and Wide Tread Tractors

Check the cost of a Jayhawk against all the time, work and money it will save and you'll find it economy to order one. None beats it for power, easy operation, quick hitch, low clearance, rugged construction, low cost. Complete with 48" scoop with removable dirt plate and automatic load leveler. Mechanical and hydraulic attachments for all purposes.

World Famous Automatic-Hydraulic Jayhawk Portable Stacker, Wagon Loader, Sweeprake, all in one machine. Handles hay, straw, all other forage crops. 21 ft. lift. 1-man operation. 1-bolt hook-up to tractor, truck, jeep. Inexpensive. Practically no upkeep. Choice mechanical or hydraulic operation.

At Jayhawk Dealers. Write Direct for Full Details

WYATT MFG. CO., INC.
Since 1903 1025 5th St. Salina, Kansas

When you gamble at CALVING TIME -you lose!

The odds are favorable when you mix KOW-KARE, costing about *two pennies a day,* with your feed at calving time *and* throughout the year. It's low cost "production insurance" . . . better milk checks. KOW-KARE's Vitamin D_2, Iodine, Iron, Tonic Drugs, Cobalt, Phosphorus and Calcium help promote better calves, save feed waste. Buy KOW-KARE today. 3 sizes, at your dealer's.

FREE Cow Book

Send for helpful 24-page illustrated treatise on "Care and Feeding of Dairy Cattle." Filled with useful health hints.

Dairy Association Co., Inc.
Lyndonville 44, Vermont

Save 1/3... Buy 50 lb. Drum

Pigs on sows too long?

From page 61

mix as recommended by the manufacturer. There are a number of good premixes of this type on the market now. Self-feed this pig starter with *shelled* corn in a creep. Make sure the pigs have plenty of water.

At Iowa State, these results were obtained using the creep feed mentioned earlier. Pigs weaned at 1 week and receiving substitute milk plus the new-style creep feed took only 1.5 to 1.8 pounds of feed per pound of gain. Pigs, on an old-style creep feed, ate 2 to 2.5 pounds of feed per pound of gain.

The addition of sugar to any creep feed will coax the pigs to eat more of it.

Just what age is best to take pigs away from the sow is still a decision only *you* can make. It depends somewhat on your housing facilities, health of sows, health of pigs, and whether or not you want to rebreed your sows or sell them within a short time after farrowing.

As some of you know, substitute milk blew into the hoglot in a hurry, and in some cases blew out again just as fast. The milks still had some "bugs" in them. But now, practical substitute sow's-milk formulas have been worked out. The use of antibiotics has contributed to the success of these formulas.

A number of farmers *are* already weaning pigs early. In 1952, Lawrence Meyer, Spring Grove, Minnesota, tried early weaning on a small scale. He took a litter of 18 pigs away from a sow at 4 days of age. The pigs were fed substitute sow's milk and averaged 46½ pounds at 56 days of age. The heaviest pig weighed 342 pounds at 180 days and the lightest weighed 266 pounds.

J. W. Thompson, Princeton, Minnesota, took 352 pigs away from 33 sows at 10 days of age. He raised 347 of the 352 on substitute sow's milk plus a good creep feed. The pigs averaged 35 pounds at 6 weeks of age. The 33 sows were sold 14 days after farrowing without any dockage.

More research is needed to find out just when is the best time to wean pigs. If farrowing stalls and pig guards are used, and not too many pigs are lost by being crushed or layed on, it seems that weaning at 3 weeks may not be too far wrong. However, Iowa State has had excellent results, as shown in the drawing on page 61, when pigs were taken from the sow at 1 week of age.

Early weaning can be used for the entire pig crop or for only a few of the pigs. Some farmers have successfully weaned their pigs piecemeal. They take the strongest pigs away from the sows at about 3 weeks of age and wean the rest at 5 or 6 weeks.

It appears now that we're gradually whipping that old pig-raiser's problem of getting pigs from farrowing to weaning age in a hurry. There'll be more developments in the future that will make this job easier yet. **END**

BOG SPAVIN?

"I CLEAR IT UP FAST!"

says C. W. Pace, Longmont, Colo.

● "As soon as I see signs of bog spavin, puff or soreness on my horses, I use Absorbine. That's the treatment advised by our veterinarian, and I have been using it for over 16 years."

Absorbine is not a "cure-all," but a time-proved help in relieving fresh bog spavin, windgall, collar gall, similar congestive troubles. Used by many veterinarians. A stand-by over 50 years. Will not blister, remove hair. Only $2.50 a long-lasting bottle at all druggists.

W. F. Young, Inc., Springfield, Mass.

ABSORBINE

KICKING COWS "GENTLED" INSTANTLY!

ONLY $12.95 PPD

● Make more money milking than selling her! Amazing new Basler Cattle Gentl-izer safely quiets toughest cow in your herd with gentle pressure that prevents cow from moving its hind legs. Easy to put on, no chains, no danger, no injury. Safe, sanitary. Thousands in use. Try 10 days at our risk on money-back guarantee. Specify breed and size when ordering. Only $12.95 ppd. U.S. Pat. 2655900; Canadian Pat. Pend. (DEALERS AND AGENTS WANTED)

PRIDE HYBRID CO. Dept. SF-6 GLEN HAVEN, WIS.

CRIB PLANS FREE!

Send for FREE crib blueprints with list materials. Also Elevator catalog—shows 8 styles.

MEYER FARM ELEVATORS CUP AND PORTABLE

Simplest, strongest — no short turns. Widest, sturdiest Portable—handles baled hay. Write us your crib problems today. State whether interested in Bucket or Portable. Postal brings FREE catalog.

THE MEYER MFG. CO. Box 1260, MORTON, ILL.

KILL RATS WITH

warfarin

WISCONSIN ALUMNI RESEARCH FOUNDATION

NO HORNS!

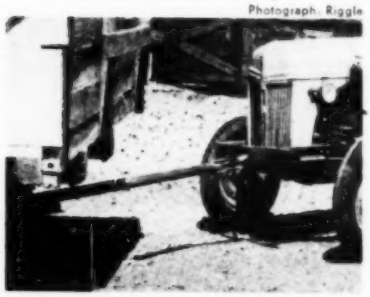
One application of Dr. Naylor's Dehorning Paste on horn button of calves, kids, lambs—and *no horns will grow.* No cutting, no bleeding. 4 oz. jar—$1.00 at your dealer's, or mailed postpaid.

H. W. NAYLOR CO. Morris 12, N.Y.

Dr. Naylor's DEHORNING PASTE

Handy hitch

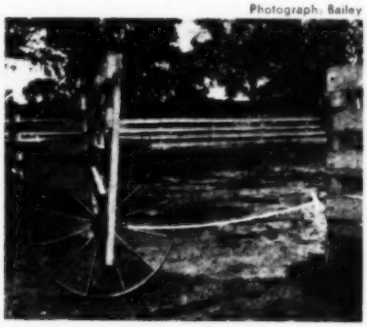
Photograph: Riggle



Combination bumper and hitch handles many jobs for J. L. (Bus) Hoy, Lancaster County, Nebraska. It's used to push wagons into tight spaces, or for loosening fence posts. Bumper is bolted to frame of tractor, and made of ½"x2½" mild steel

Wheel on gate

Photograph: Bailey



Big wheel on this easy-action gate is a laborsaver for Guy Steig, of Walworth County, Wisconsin. No pulling or tugging. No need for massive hinges, heavy bracing

YOU NEED TO KNOW

Acres: Can you farm *big* on a small farm? Page 45.

Pasture: Can spring shortage be overcome? Page 46.

Politics: What's *your* view on farm program? Page 50.

Corn: Do new methods pay off in yield? Page 52.

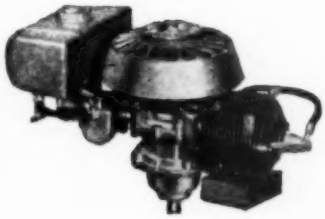
Dairy: Why not feed more grass, less grain? Page 58.

Cattle: Ever haul green feed to your bunks? Page 60.

Hogs: When is *right* time to wean pigs? Page 61.

Silage: Are you giving your back a break? Page 62.

be modern— go *Lightweight*



The POWER PRODUCTS *Lightweight* packs more power per pound

When it comes to lightweight power nothing can touch this engine. Not only is it amazingly lightweight, but it has every important quality feature to assure long, dependable performance

- LIGHTWEIGHT
- MINIMUM EFFORT STARTING
- LONG LIFE, LESS MAINTENANCE
- FULL CARBURETION
- BALL BEARING MAIN BEARINGS
- SEALED DRIP PROOF CRANKCASE
- FULLY ENCLOSED FLY-BALL GOVERNOR
- NO OIL CHANGING OR CHECKING
- CLOG FREE COOLING SYSTEM

For portable equipment, you can't find a better engine for lightweight and dependability.

be modern— go *Lightweight*

POWER PRODUCTS CORPORATION
GRAFTON, WISCONSIN

CROP HANDLING on the move with The "OTTAWA" Line 185 Silage Elevator

a respected name in silage elevating.

GIVES YOU ALL THESE SILAGE ELEVATING ADVANTAGES

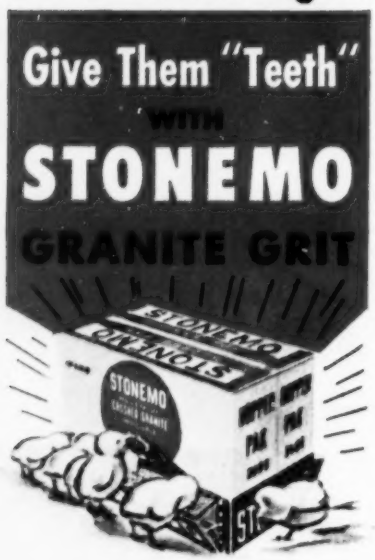
- **ECONOMY** — Utilizes any type power. A 3 H.P. electric motor will handle requirements. Elevates up to a TON A MINUTE and absolutely will not plug up.
- **SAFETY** — Eliminates hazard of putting up blower pipe. Reduces chaff and dust in the air. Super strong derrick assures supreme safety on all elevating jobs.
- **BETTER FEED QUALITY** — The stems and leaves do not become separated elevating the "OTTAWA" way. The silage is in a more palatable and natural state. Other methods tend to blow a certain amount of food value out in dust. Recognized by Agricultural Stations and Universities as giving a better quality feed and operating economy.

Write for free literature on silage elevating.

The "OTTAWA" Line — "THE PIONEER LINE SINCE 1859"

KING-HAMILTON CO., Ottawa, Ill.

Start Chicks Right!



. . . IN THE EASY-TO-USE

Hopper-Pak!

Your chicks need "teeth" to grind their feed — *right from the start!* Give them STONEMO Granite Grit, along with cracked grains, the first 2 days . . . to help prevent "paste-ups" . . . to get your chicks off to a good start!

Then keep STONEMO before your birds free choice at all times . . . to help them make better use of their feed . . . grow faster . . . lower feeding costs!

Get STONEMO in the handy 10-lb. HOPPER-PAK. It saves work — saves time! Trays pull out to make a 2-way diner. Contains enough for 100 chicks up to 3½ or 4 weeks. Order STONEMO HOPPER-PAKS when you order chicks!

FOLLOW THESE 3 STEPS!

FINE SIZE STONEMO — First 2 days—Feed fine chick grains and fine-size STONEMO. Mix 10 lbs. grain to 1 lb. grit. 3 days to 4 weeks—Start feeding mash...give fine-size STONEMO in HOPPER-PAK, or hoppers.

MEDIUM SIZE STONEMO — 4 weeks to 8-10 weeks—Give medium-size STONEMO free choice in clean hoppers.

COARSE SIZE STONEMO — 8-10 weeks on—Keep coarse-size STONEMO before birds at all times.

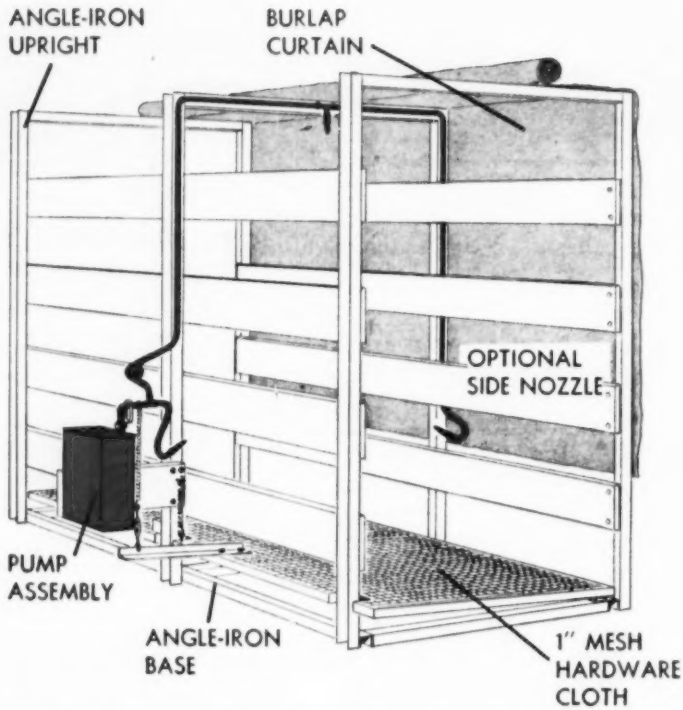
Also in 50 and 80-lb. economy bags. See your feed or poultry supply dealer!

STONE MOUNTAIN GRIT COMPANY, INC.
LITHONIA, GEORGIA

STONEMO
the Grit with the "EXTRA GRINDING SURFACES"

How to build a

Treadle-type sprayer



Base of treadle has an angle-iron frame covered with hardware cloth of 1" mesh. The treadle is hinged at one side, should travel about 2" when stepped on by cattle

Why not let your cattle take care of the fly-control problem? They can do it if you build a treadle-type sprayer.

You can buy a pump-assembly kit for the sprayer, and build the framework yourself. Instructions for mounting the pump come with each kit.

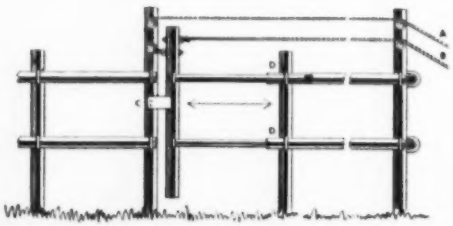
The treadle should measure 30"x36". Uprights are 62" high. They're welded to 28"x30" treadle base. All framework can be made from 1½"x3/16" angle iron. Use 2x4s as chute sideboards.

Mount the pump assembly so the side nozzles are 16" from the treadle when it's depressed. A spring pulls the treadle back into position after each spray job.

When your sprayer is completed, set a post outside the chute next to the pump assembly, then nail boards from post to chute so cattle can't rub against the pump and damage it.

Tack burlap on sides of chute for a windbreak. After cattle become familiar with the chute, hang burlap over the ends. Bottom of curtains should be about 20" above the ground.

Safe gate for handling bulls



Drawing: Severson

A telescoping gate between bull pen and breeding pen was built by Paul Blotz, of Iowa County, Wisconsin. It's handy, as well as being safe.

Gate is operated by ropes. Pulling rope B opens the gate, and a tug on rope A closes it. Clamp C holds gate closed. Steel pipes slide together at point D.

"My steel building is a good investment... a real improvement to my farm"

says Clarence E. Bratsch
Danube, Minnesota

Mr. Bratsch and two of his sons in their clear-span steel building. Mr. Bratsch is in the center, and his sons on the tractors are Ervin, left and Alver, right.

● When asked why he preferred his steel building to any other type, Mr. Bratsch replied from personal experience, "In the summer of 1952 I put up a wooden machine shed, 40 by 70 feet. My three sons, two carpenters and I put up the shed in three weeks. Last summer, I bought an all-steel machine shed, 36 by 80 feet. A six-man crew erected the steel building in just three days. And although the *steel building is larger, the actual cost of the finished building was less.*"

Mr. Bratsch owns more than $60,000 worth of farm machinery, which he stores in his steel building. "My steel building is worth more, too, because it's fireproof—I don't have to worry about a serious fire that could damage a lot of high-priced farm machinery and my other buildings."

Being a very practical man, Mr. Bratsch considers his steel building an investment in the future of his farm. In his own words, "Two of my sons and I farm 680 acres 7 miles south of Danube. We haven't any time to spend in repairing or replacing buildings, and it is hard to hire work done. To make farming pay off today, you have to be sure that your time is spent right and that *every dollar invested in equipment will bring a good return* in one way or another. My steel building is a good investment because it saves in maintenance, it looks nice, and is a real improvement to my farm."

You, too, will get the most for your money when you invest in a factory-made steel building, manufactured with long-lasting U·S·S Galvanized Steel Sheets for roofs and walls and a U·S·S Structural Steel framework. U·S·S Galvanized Steel Sheets contain a guaranteed 1¼ ounce coating of zinc per sq. ft. in accordance with ASTM Specifications.

4-455

United States Steel Corporation produces high-quality U·S·S Galvanized Sheets and Structural Steel which our customers manufacture into durable farm buildings. Your requests for information will be forwarded to the manufacturers of these buildings, and you will hear directly from them.

SEND THIS COUPON FOR FURTHER INFORMATION

Agricultural Extension Section,
United States Steel Corporation
Room 4262, 525 William Penn Place
Pittsburgh 30, Pa.

I am interested in steel buildings for the following:

- ☐ machinery storage
- ☐ grain storage
- ☐ hay storage
- ☐ cattle shelters
- ☐ dairy barns
- ☐ poultry houses
- ☐ other .....

Approximate size or capacity .....
Send information to:

Name .....

Address ..... **Town** .....

County ..... **State** .....

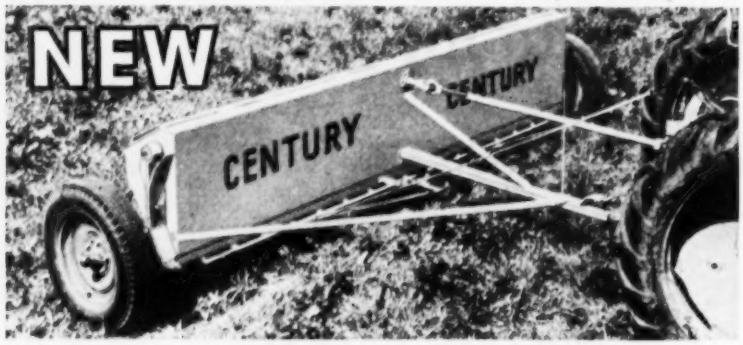
☐ Please have a representative call on me with further information.

UNITED STATES STEEL

sensationally new . . . a CENTURY exclusive!

PTO SPREADER

Spreads any fertilizer . . . sows most seeds . . . or your money back



Spread your fertilizer in half the usual time at 12 to 15 mph. Exact rate per acre at any speed. No slipping on rough, wet or frosty ground. And, operating from the PTO, this spreader cleans itself, standing still, in 10 minutes or less PTO plus an entirely new agitator principle, **chain-saw action,** makes this unusual guarantee possible: **Guaranteed**—in writing, to spread any commercial fertilizer in any condition and sow seeds from clover to soybean. There's also a two year guarantee against agitator breakage or excessive wear. But this is only part of the story. See Century's absolutely amazing new spreader with dozens of revolutionary new features at your dealer's. Send coupon for illustrated brochure.

Century Engineering Corp. Cedar Rapids, Iowa
Send me more information on your new
☐ PTO spreader ☐ PTO seeder
Name _____
Address _____
City _____ State _____

See Century's grass and legume seeders, too. PTO driven. Mount on tractor, land roller or packer.

CENTURY ENGINEERING CORPORATION

Century

Successful Farming's practical, up-to-the-minute information will help you and your family enjoy better farm living.

Successful Farming devotes more editorial pages to livestock and poultry material than any other major farm magazine. Write for classified advertising details.

Don't Let Sore Teats, Scab Teats—Bruised Teats Close the Teat Canal

To maintain unrestricted milk flow through the canal of injured teats, use Dr. Naylor's Medicated Teat Dilators. They provide gentle, non-irritating support to delicate lining of teat canal and keep end of teat open in its natural shape while tissues heal.

ANTISEPTIC. Dr. Naylor Dilators perform the same function in teat canal as sterilized, absorbent dressings applied to external wounds. Contain SULFATHIAZOLE — the medication is IN the Dilators and is released slowly for prolonged antiseptic action.

Due to their soft, absorbent construction, Dr. Naylor Dilators fit either large or small teats — are easy to insert and stay in the teat.

EASY TO USE— Simply keep a Dr. Naylor Dilator in teat between milkings until teat milks free by hand.

KEEP TEAT OPEN
KEEP IT HEALING
KEEP IT MILKING

Large Pkg. (45 Dilators) **$1.00**
Trial Pkg. (16 Dilators) **50c**
At drug and farm stores or by mail postpaid.
H. W. Naylor Co., Morris 8, N.Y.

Dr. Naylor's MEDICATED Teat Dilators

Veterinary

Heating water for sows can prevent constipation

Bred sows just don't drink enough water to stay in good condition when the water is icy. One hogman found this out when he called on the veterinarian to look at his "sick" sow.

The veterinarian explained that because the sow didn't drink enough of the icy water given her, she was constipated and appeared sick. He recommended that the farmer warm the water to increase the amount the sow would drink.

• • • •

Break "gutter habit" with wood platform

Every dairyman has at least one cow that likes to step back and stand in the gutter a good part of the time she's in the stanchion. Besides making cows dirty, this habit often leads to sore and tender feet.

Photograph: Bailey

A gutter platform, like the one shown here, will keep these cows up out of the gutter. The platform is made of 2x4s.

When cleaning the gutter, you can throw the platform out of the way with a manure fork, and replace it the same way.

• • • •

Play it safe with Newcastle vaccination

It's not easy to tell for sure whether baby chicks are from vaccinated or naturally immune hens, according to authorities at Cornell University. Such chicks have a certain degree of resistance to Newcastle.

However, if the chicks lack such protection, vaccination may be necessary. The wing-web or stick method can be used, but experiments indicate the owner runs a risk of a heavy loss. The intranasal method was demonstrated as being safer and equally effective, although it has the disadvantage of taking longer to apply.

helps

New angle on dwarfism — X-ray of backbone

Workers at Iowa State College report that carriers of dwarfism show distinct compression of loin vertebrae when they are X-rayed.

Research is continuing further to prove or disprove this new wrinkle in detecting dwarfism. Authorities are still divided on the value of the profilmeter in identifying dwarfism in beef cattle.

• • • •

Watch cattle and sheep for listeriosis

Be on the lookout for listeriosis. It's a winter sheep and cattle disease that is most dangerous through March.

Classed as a brain inflammation, these are the main symptoms of listeriosis: fever, stupor, drooping of an ear, paralysis of the jaw, and sometimes inflammation of an eye.

If you spot these symptoms, call your veterinarian. Accurate diagnosis of the disease requires laboratory tests.

• • • •

"Mad" cow has bad liver —not a brain injury

Recently, an owner called and reported that one of his cows had suddenly "gone crazy." The cow had chased him over a fence, then attacked a manure spreader standing in the barnyard.

When we reached the farm, the cow was lying where she'd fallen after trying to climb up the side of a concrete wall. A variety of ailments can cause cattle to show such symptoms, but in this particular case trouble was due to a large abscess in the liver. This ailment is fairly common and probably is often overlooked as a possibility in cases blamed on poisoning, or some kind of brain injury.

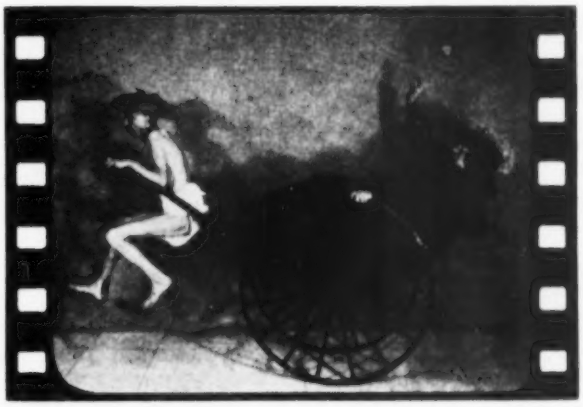
• • • •

Pigs need regular worming when run on old lots

Not long ago we saw some pigs that had good pasture, and were getting an excellent ration—yet the animals didn't seem to be gaining properly. The owner didn't think they were wormy because he'd treated them with sodium fluoride right after they were weaned.

However, an investigation showed that the pigs were badly infested with ascarids. Remember—pigs may need worming at regular intervals, especially when they're running on permanent pastures, or in old lots where they continually are reinfecting themselves by picking up worm eggs.

THOSE WERE THE DAYS—when mama was wary of newfangled gadgets—and papa raged about everything including the "light" bill. Today, the average family uses a dozen different household electric appliances every day. And electricity has gone down in price—even in the last 15 years!



YOU THINK THIS IS BIG—you ought to see the way the electric industry has grown. Electric light and power companies have *tripled* their supply of electricity in 15 years! To keep ahead of the nation's needs, they'll add half again as much by 1960!

DON'T LOOK NOW, BUT—! Although most Americans aren't aware of it, some people have talked the federal government into the electric power business in a big way—$6 billion worth—at the taxpayers' expense. And they're still pressing to have the government spend more.

You can help stop such wasteful spending by looking *twice* at any plan for a new federal power project to see (1) if it's really necessary or (2) if it's a job electric companies could do better at their own expense. Then let your congressman know what you think. AMERICA'S ELECTRIC LIGHT AND POWER COMPANIES*

*Names on request from this magazine

Watch for "YOU ARE THERE"—on CBS television—witness history's great events

Up to 50% Reduction in Fuel Input... 70 to 90% of Heating Season!

WILLIAMSON Gasaver and Oilsaver De Luxe Furnaces, unlike ordinary furnaces, are controlled by an inside and outside thermostat which electronically control a two-speed blower (on forced air models) and modulate the fuel input.

Since 70-90% of the heating season temperatures throughout most of the country are above 25-30 degrees, these furnaces will during such periods, operate on a reduced hourly fuel input and half-speed blower.

Balanced heat and fuel economy never before realized is possible and a wonderfully new experience in comfort is obtained. Write today for details.

WILLIAMSON
WARM AIR FURNACES

GASAVER
De Luxe Furnace

THE WILLIAMSON HEATER COMPANY
3589 Madison Rd., Cincinnati 9, Ohio

Please send me information on:
☐ GASAVER DE LUXE ☐ OILSAVER DE LUXE

Name_____

Address_____

City_____ Zone____ State_____

THE HEN KNOWS

Hens and chicks know when they need Pilot Brand Oyster Shell.

They take it only when nature tells them to. All you need to do is to keep it before them all the time—it will be profitable for you to do this.

PILOT BRAND OYSTER SHELL

FOR POULTRY

In the bag with the big blue Pilot Wheel
At most good feed dealers

OYSTER SHELL PRODUCTS CORP.

New Rochelle, N. Y. St. Louis, Mo.

The easy way to

Iron a pair of pants

"There's nothing to ironing a pair of my husband's heavy work pants," says Mrs. Harvey Starkey, Buffalo County, Nebraska, farm wife. (Hers is one of the bright utility rooms you see on page 65 in this issue of *Successful Farming*.)

Her automatic ironer does the work—all she does is guide the damp garments under the roll. Because the ironer puts so much pressure on the clothes it gives them a finished smoothness that you can not accomplish by ordinary methods.

Keeping the ironer in a handy place is one of the secrets of learning to use it constantly. Mrs. Starkey has a roomy, well-lighted spot in her utility room—her ironer is always ready to use.

She tells here how she irons pants:

1. "First, I run the pocket linings under the roller, holding them there till they are completely dry and flat.

"For a perfect ironing job, clothes should be quite damp, and *evenly* dampened. Taking them from the dryer while they are still plenty damp is the way to get best results."

2. "Then I pull the top of the trousers over the hot shoe of the ironer up to the depth of the pockets. The whole top can be ironed continuously—no need to stop for changing the position of the garment.

"The roller carries garment through—I just stop it long enough to give extra pressure and heat to seams, facings, and plackets."

Photographs: Reynolds, Photography, Inc.

3. "Finally, starting with the cuff—allowing time to make it very dry and smooth—run each pants leg through up to the place ironed in step 2.

"All I have to do here is guide the leg straight so it will be creased right. Done on the ironer, the pants have sharp, long-lasting creases.

"Ruffled curtains to work clothes—my ironer does them easily and well."

Farmer's Washington

From page 18

fore, the betting is getting a little stronger that the president will veto a straight 90-percent-of-parity guarantee. And, if he does, *Congress may pass it over his veto.* At least this was the temper of Congress after the president presented his message.

What will happen? Before the fight in Congress is over there will be a lot of trouble. Vice-President Nixon will do his best to steer the legislative proposals when the going gets rough. He returned to the capital from a trip around the world to find President Eisenhower already determined to use all the political pressure at his command to swing congressmen into line. Nixon thinks the patronage weapon will be used. Congressmen who don't go along can't expect the administration to give them jobs to pass out to their constituents. Congressmen who balk may not be able to get the Republican organizational support they need. *But it is doubtful if these pressures will work*—particularly since Congress is so evenly divided and the administration can't bring much pressure on Democrats.

A new assistant secretary. Secretary Benson, of course, foresaw the difficulty he would have. He brought into the Department of Agriculture Ross Rizley, former Republican congressman from Oklahoma, as an assistant secretary *to promote the program on Capitol Hill.*

Rizley was known as a conservative Republican when he was in Congress. He was popular with the Southerners and with conservative Republicans.

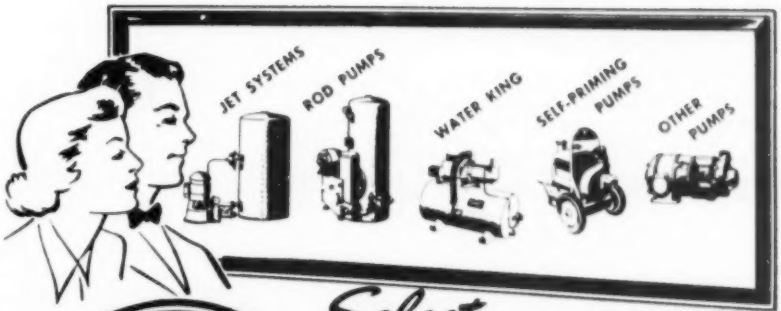
Secretary Benson also has reorganized his public-relations staff with the idea of getting over stronger *to the farm public* what he is trying to do. Harold Belknap, a San Francisco public-relations expert, brought together a new staff consisting of former newspaper- and public-relations men. One of these was Rollis Nelson, of Bismarck, North Dakota, formerly a member of the staff of Senator Milton R. Young, a severe critic of Benson.

Good risk. A study of borrowers from the R.E.A. and the status of their accounts, indicates that they may be among the best financial risks in the country.

In the entire United States, only 34 borrowers are overdue in their payments. More than 700 borrowers have made advance payments.

Note this: The rural electrification administrator, Ancher Nelson, is advocating that the interest rate remain at 2 percent. Some officials have been asking that the rate be increased to 4 percent in line with other federal interest-rate boosts.

But Nelson says the majority of American farms already have been electrified, and that it would be hard even under the most favorable conditions to reach marginal farmers who still don't have power. It would hardly be fair, he contends, to make it even more difficult to finance R.E.A. projects in marginal areas. **END**



PEERLESS PUMPS

Select THE PUMP YOU NEED FOR ANY WATER SERVICE *from America's Most* COMPLETE LINE!

Exactly Right

IN DESIGN, IN PERFORMANCE, IN PRICE AND IN SERVICE

Mechanically they're perfect. Hydraulically they're most efficient. They're good looking in appearance and completely dependable in operation. Top quality motors, heavy-duty cases, finely engineered parts. Loaded with other features. Nationwide service. Make it a 19 *thrifty* 4 by buying a Peerless pump this season.

Take the Peerless Water King for instance. It delivers up to 800 gph from wells up to 20 ft. deep. It's entirely new in design, appearance and performance. Comes complete with any size tank, ready to run. The Water King is the quietest of all water systems and it operates at half usual pump speed.

MAIL TODAY FOR FREE LITERATURE

PEERLESS PUMP DIVISION
Food Machinery and Chemical Corp.
2005 Northwestern Ave., Indianapolis 8, Ind.
Please send literature checked.
☐ Tank Mounted Shallow Well Unit ☐ Jet Systems
☐ Deep Well Rod Pump ☐ Deep Well Turbine Pump
☐ Submersible Pumps
☐ Self-Priming Utility Pumps

Name_____
Address_____
Town_____ State_____

Your Best Pump Buy is a PEERLESS PUMP

The DAVIS Model 100 Loader Gives You *MORE FOR THE MONEY*

DAVIS PRODUCTS WICHITA KANSAS 1ST QUALITY DURABILITY APPEARANCE PERFORMANCE

features

- 12-MINUTE HOOK-UP TIME
- CLEAR VISION AT ALL ANGLES
- RUGGED BOX-FRAME CONSTRUCTION
- GET ON FROM EITHER SIDE OR REAR
- ATTACHMENTS FOR YEAR 'ROUND USE

Dozer Blade

Manure Fork

Utility Bucket

Push-off Sweep rake Stacker

Post Driver and Concrete Buster

Crane

Manure Bucket

Thousands of farmers and contractors are finding that the unconditionally guaranteed Davis Hydraulic Loader really pays off. Many convenient attachments give you year 'round use, and it's a brute for strength and durability. After initial installation you can put it on or take it off in only 12 minutes. Streamlined construction permits you to go anywhere...see anywhere and get on or off from either side or rear. It fits most popular tractors. See America's favorite loader, the Davis Loader, at your dealers.

SEND this coupon for free literature and name of distributor.

I AM A FARMER ☐ DEALER ☐ CONTRACTOR ☐
Please send me literature on the DAVIS LOADER to fit a _____ tractor.
Name_____
Address_____
Town_____ State_____

MID-WESTERN INDUSTRIES, INC.—Dept. S, 1009 S. West St., Wichita, Kansas

FARMERS' FRIEND

Cushman 780 SHAFT DRIVE TRUCKSTER

500 lbs. cap. 3/4¢ per mile total operating cost

Cut out waste time lugging materials around your farm! Get the EXTRA power advantages of big vehicle shaft drive and 3 speeds forward; one reverse. Heavy duty welded steel frame, cap. nearly 10 cu. ft., pick up type body—complete with tail gate. Up to 75 miles per gallon—and up to 35 miles an hour. Do your chores faster and easier, save time and money!

- *Sold and Serviced Nationally*
- *See your dealer for free demonstration*
- *Write for free illustrated literature*

CUSHMAN MOTOR WORKS, INC. 948 No. 21 St. Lincoln, Nebraska

No. 1 livestock magazine in its field, Successful Farming leads all major farm magazines in editorial pages devoted to livestock.

Swift's GOLD BEAR BRAND PESTICIDES

See the Authorized Swift Plant Food Dealer in your community for modern weed and brush controls for crops, pastures and fence rows . . . Gold Bear Brand FLY SPRAY, containing 50% malathion, kills flies resistant to DDT and Lindane. Approved for use inside dairy barns.

NEW MEYER HAY CONDITIONER

Make HAY the MEYER way

Hay cured MEYER WAY is worth more to sell or feed. Stems dry fast as leaves . leaves stay on . hay retains color protein and up to 300% more carotene (Vitamin A). Cuts and conditions hay at same time. Curing time cut in half—hay can be put up same day it's cut. Danger of sun burning, bleaching, rain spoilage is reduced. Features Exclusive Floating Rotary Pick-up that raises freely over rocks and terraces.

Write for FREE Folder and Prices Today!

MEYER MFG. CO.
BOX 7160 MORTON, ILLINOIS

MAKERS OF FAMOUS MEYER ELEVATORS

Your Successful Farming *stores*

Here are local stores interested in the farm family, and carrying out the practical editorial ideas from *Successful Farming* magazine. Starred stores have full-time home planning consultants, ready to offer suggestions and advice.

Illinois

Champaign	Robeson's
Springfield	A. Dirksen & Sons

Indiana

Marion	Kelley Furniture
*South Bend	Robertson Bros.

Iowa

*Cedar Rapids	Smulekoff's
*Des Moines	Younkers
Dubuque	Stampfer's
Fairfield	Bradshaw's
Iowa City	Kirwan Furniture
*Marshalltown	The McGregor Co.
*Sioux City	Martin's
Waterloo	Black's

Kansas

Coffeyville	Mehornay's
Hutchinson	Wiley's
Salina	Mehornay's

Michigan

*Lansing	J. W. Knapp Co.

Minnesota

Albert Lea	Skinner-Chamberlain
Mankato	Landkamer Bros.
Worthington	Hanson's Town & Country

Missouri

Columbia	Mehornay's
*Kansas City	Mehornay's
Marshall	Mehornay's
Maryville	Mehornay's
Sedalia	Mehornay's
*Springfield	Heer's, Inc.
*St. Louis	Stix, Baer & Fuller

Nebraska

Fremont	Kavich's
Grand Island	Swan's Furniture
Hastings	Swan's Furniture
Kearney	Swan's Furniture
*Lincoln	Gold & Company
McCook	Swan's Furniture
Norfolk	Ballantyne's
*Omaha	Orchard & Wilhelm

New York

*Albany	W. M. Whitney & Co.
*Utica	Ribyat Furniture
Watertown	Household Merit

Ohio

Ashtabula	Carlisle-Allen Co.
*Columbus	F. & R. Lazarus
*Dayton	The Rike-Kumler Co.
Medina	Longacre & Son
Mount Vernon	The Rudin Co.
*Springfield	People's Outfitting Co.
Warren	The Warner Co.

Oklahoma

*Enid	Long-Bell Lbr. Co.
*Tulsa	Dickason-Goodman

Pennsylvania

*Pittsburgh	Joseph Horne Co.

"I Love to Garden with my ROTO-HOE"

Yes, ROTO-HOE is so easy to operate that women enjoy using it too. And it's easy to buy—still selling at the low, low 1947 price, due to the tremendous customer acceptance it has earned—ROTO-HOE **complete** costs only $134.

ROTO-HOE

EXTRA DIVIDENDS.

Not only is ROTO-HOE first cost most modest, but there is a complete line of attachments all using the same basic power unit, all easily and quickly interchangeable in minutes. All are thoroughly engineered and "field-proven" and the cost is amazingly low. You can pump, spray, saw wood, throw snow, mow, trim and edge lawns as well as cultivate and till gardens.

GET THE FACTS

ROTO-HOE's nation wide distribution means there's a dealer near you. Write today for free color catalog and nearest dealer's name.

ROTO-HOE & SPRAYER COMPANY
Box 66 Newbury, Ohio

take the air to the job

Buying a *Tankmobile* is like hiring another hand. It's a portable service station for the farm that makes tire inflation and lubrication jobs easier. It spray paints too. Single cylinder compressor built for heavy duty. Stainless steel tank. Rubber tired wheels. Electric motor or gasoline engine. Safest and most portable air compressor on the market. Lifetime performance.

See your dealer for the Complete Line or write 205 Railroad Avenue Harrison, Ohio.

CAMPBELL-HAUSFELD

RANCHERS! CATTLEMEN! FARMERS!

CALL YOUR CATTLE WITH THE NEW Kattle Kaller AUTO HORN

GUARANTEED to Call Cattle for Feeding, Shipment, Dehorning

Bellows Like a Bull—Cattle Respond Quickly. Greatest time-saver for livestock industry. Easily installed on car—truck. Deep penetrating tone carries for miles. Imitates any cattle sound. Great novelty horn, too. If your dealer can't supply you, order direct and send us his name. Send check, M. O., C. O. D. Money back if not satisfied. Dealer inquiries invited.

Complete with Steering Post Control Lever

SPECIAL INTRODUCTORY OFFER $10.95 Postpaid. ($2 below reg. list)

KATTLE KALLER DIV., 1928 So. 20th St., Omaha, Nebr.

Decorating advice. Stores offering **Successful Farming's** home planning service are listed on this page. Visit starred store nearest you for help with decorating problems.

PUMP WATER *FAST!*

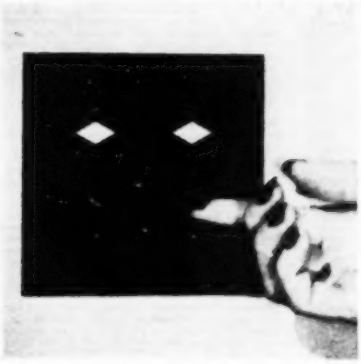
DRAIN WASH TUBS, CELLARS, CISTERNS IRRIGATE—FILL TANKS—DRAW WELL WATER

Pumps 2800 GPH 420 GPH at 75' High or 1600 GPH from 25' well. Sturdy, Rustproof Alloy Metal Six Blade Impeller. Uses any 1/8 to 1/2 H.P. Motor. Will not leak or clog. Fits any garden hose. Immediate Money Back Guarantee. Send Check, M.O., or C.O.D. 8.95 IN U.S.

MOORE MANUFACTURING CO.
SWEDESBORO 21 NEW JERSEY

New in homemaking

From page 32



Diamond Glows are luminous stickers that help you locate light switches, keyholes, or the telephone in a dark room. Decorate the wall by your child's bed with the stickers—although they aren't noticeable in daylight, they glow brightly in darkened room. Cost is $1, postpaid, for 240 stickers.—*Walter Drake, Drake Building, Colorado Springs, Colorado.*

All Purpose Blancher is a handy combination of an 8-quart stewing kettle and 7-quart colander with vaporsaving lid. It is ideal for blanching vegetables for the freezer, or for any large-quantity steaming or cooking. Use colander for washing greens or berries, the kettle for making jellies. Durable, white enamel finish is resistant to stains from acid foods, and it is easy to clean. Costs about $3.49, in hardware, variety, department stores.—*Federal Enameling and Stamping Company, Box 626, Pittsburgh 30, Pennsylvania.*

The Dor-File Broom Holder is a simple, but useful gadget that fastens to wall with a single screw, and holds a mop, broom, rake, shovel, or hoe. Dor-File is steel with rubber coating that grips the broom. Price is 25 cents at variety and hardware stores.—*Henry J. Morton Company, 022 S. W. Columbia, Portland, Oregon.*

SPRUCE UP FOR SPRING

enjoy the new season more!

Yes, that's what the stores on this page are inviting you to do during their big SPRUCE UP FOR SPRING celebration.

It's a spring tonic guaranteed to chase those winter blues and help you, your family, and your home greet spring with a cheery smile! Most of the stores listed here are planning a full schedule of interesting events especially for farm families, including homemaking demonstrations, special features, prize drawings, and fun for all!

Fine new selections of home furnishings, accessories, appliances, and fashions will be featured. Also, Successful Farming spring editorial ideas will be presented including examples of good furniture arrangement and other interesting decorating ideas. In the stores, you'll want to pick up a copy of the SF Furniture Arrangement Kit (see story on page 169) . . . your easy guide to attractive, comfortable rooms.

Watch your newspaper for an announcement of SPRUCE UP FOR SPRING dates. Don't miss it! The friendly "SPRUCE UP" store nearest you is listed here:

Illinois

Decatur . . . . . Block & Kuhl Co.
Pekin . . . . . Grossweilers
Springfield . . . . A. Dirksen & Sons

Indiana

Marion . . . . . Kelley Furniture

Iowa

Cedar Rapids . . Smulekoff's
Dubuque . . . . . Stampfer's
Fairfield . . . . . Bradshaw's
Iowa City . . . . Kirwan Furniture
Marshalltown . . The McGregor Co.
Sioux City . . . . T. S. Martin Co.
Waterloo . . . . . Black's

Kansas

Coffeyville . . . . Mehornay's
Hutchinson . . . . Wiley's
Salina . . . . . Mehornay's

Michigan

Lansing . . . . . J. W. Knapp Co.

Minnesota

Albert Lea . . . . Skinner-Chamberlain
Mankato . . . . . Landkamer Bros.
Worthington . . . N. L. Hanson Furniture Co.

Missouri

Columbia . . . . . Mehornay's
Marshall . . . . . Mehornay's
Maryville . . . . . Mehornay's
Sedalia . . . . . Mehornay's
Springfield . . . Heer's, Inc.
St. Louis . . . . . Stix, Baer & Fuller

Nebraska

Grand Island . . Swan's Furniture
Hastings . . . . . Swan's Furniture
Kearney . . . . . Swan's Furniture
Lincoln . . . . . Gold & Company
McCook . . . . . Swan's Furniture
Norfolk . . . . . Ballantyne's
Omaha . . . . . Orchard & Wilhelm

New York

Utica . . . . . Ribyat Furniture
Watertown . . . Household Merit

Ohio

Ashtabula . . . . Carlisle-Allen Co.
Chillicothe . . . . Ehenhack & son
Medina . . . . . Longacre & Son
Mount Vernon . The Rudin Co.
Springfield . . . . People's Outfitting Co.
Warren . . . . . The Warner Co.

Oklahoma

Broken Arrow . Dickason-Goodman
Tulsa . . . . . Dickason-Goodman

Pennsylvania

Erie . . . . . Erie Dry Goods

Farmer's Trading Center

Advertisements using illustration or display (large) type, $7.00 per agate line. Available to advertisers who make a mail offer of merchandise (including poultry, livestock, pet stock, or services (schools, etc.) at a stated price, or offer a mail-order catalog. Word classified (no illustration or display type)—14-word minimum—all classifications—90 cents a word. Write Successful Farming, Des Moines 3, Iowa.

FOR FARM WOMEN

Nylons 8c pair, Anklets 12c pair, Socks 9c, Print 17c, Panties 12c, Dresses $1.95, Slips 17c, Undershirts 17c, Rugs 70c, Robes $1.65, Spreads $2.65, $70.00 Watches—$18.95, Jewelry Sets $1.25, Pens 8c, Combs 1c, Aspirin $1.00-1,000, Brushes 9c, Razor Blades 5-2c, Electric Razors $2.00. Complete Stock List, Picture Catalogue, 25c if sent immediately.
Sibert's, Chattanooga 4, Tenn.

Women, Make Money Weaving in your home during your spare time. Weave beautiful hand-loomed rugs, tweeds, draperies, suitings on Newcomb Loom. No previous experience necessary—easily operated. Rugs in great demand. Free illustrated catalog. Newcomb Loom Co., established 1898, Davenport 208, Iowa.

Nylon Hosiery Bargains: Factory rejects (Thirds) 6 pair $1.00. Our Better Grade (Seconds) 3 pair $1.00. Our Select Grade (Irregulars) 3 pair $2.00. Postpaid when cash with order. Allen Hosiery Company, Box 349, Dept. D, Chattanooga, Tenn.

All Wool Rug Supplies, prepared for braiding, weaving. Lowest Prices. 14 colors. Satisfaction Guaranteed. Free Samples 3-color "First Braided Rug" package! Easy directions. All materials, equipment, $6.50 postpaid. Michigan Wool Products Company, Benton Harbor 22, Michigan.

Outdoor Toilets, Cesspools, Septic Tanks cleaned, deodorized with amazing, safe, harmless powder. Easy, economical to use. Saves digging, pumping. 150,000 customers guarantee satisfaction. Details Free. Burson Laboratories, Dept. 0-23, Chicago 22, Illinois.

Free Catalog—Save on cottons, rayons, nylons—thrilling values for family and home—shirts, underwear, dresses, prints, towels, sheets, children's wear. Money back guarantee. South Carolina Mills, Dept. 292, Spartanburg, South Carolina.

Peter Pan, Snow White, Seven Dwarfs, Cinderella, Red Riding Hood, etc. Full Size patterns 16" to 24" high. All for $1.00. Mastercraft 37A, 7041 Olcott, Chicago 31, Illinois.

Good Money In Weaving. Weave rugs at home for neighbors on $69.50 Union Loom. Thousands doing it. Booklet free. Union Looms, 80 Post St., Boonville, N. Y.

101 Full Size patterns. Smart, new, gifts, novelties, lawn figures, shelves, action windmills, alphabets. Plus "Make Money Jig Sawing." Only $1.00. Mastercraft 35A, 7041 Olcott, Chicago 31, Illinois.

12 New Towels, Large Size, $1.00! Assorted colors. New, not seconds. Money-back guarantee. Order Now. Supply limited. Towel Shop, Dept. 195, Box 881, St. Louis, Mo.

Look: Full Fashioned Nylon Hosiery. Irregulars 3 pr. $2. Seconds 3 pr. $1. Thirds 6 pr. $1. Satisfaction guaranteed. Premier Sales, Box 8177, Chattanooga, Tenn.

Women make money at home, spare time. Sew ready-cut Rap-A-Round. Easy, profitable. Hollywood Mfg. Co., Dept. AA, Hollywood 46, Calif.

Use Our "Family Group" Buying Plan. Write For—"The Thrifty Way To Purchase." Every Item Unconditionally Guaranteed.
LibDistCo., Box 208, Thomasville, N. C.

Garment Bags Giant Size, Heavyweight plastic. Money back guarantee. 3 for $1.00. Order now! Murray Hill House, 157 East 31st street, New York.

Church Groups Raise Funds Easily! Free catalogue. Complete credit. Over 50 useful, unusual moneymakers. Beb Products, Dept. 5317, Oneonta, New York.

Thrilling, Profitable Home Business. Make fast-seller chenille monkey trees, dolls, flowers. Terrific holiday demand. Information free. Velva, Bohemia 25, N. Y.

For golden or silver anniversary invitations, napkins, guest books, doilies or wedding invitations, write
Maas & Co., Bonner Springs, Kansas.

Business firms—write Successful Farming for details about classified advertising.

FEATHERS WANTED

Top Prices From Midwest. Your new goose and duck feathers always bring highest prices and immediate payment when shipped to Midwest—nationally known for dependability. Ask for free shipping tags. For quotation on used goose and duck feathers, send advance sample. Midwest Feather Co., 1348 W. Cermak Rd., Chicago 8, Ill.

Absolutely Highest prices paid for new and old Goose & Duck feathers. Send for free tags and shipping instructions. For Top prices on used feathers mail small sample from your featherbed in ordinary envelope to Northwestern Feather Co., Dept. B, 212 Scribner NW, Grand Rapids 4, Mich.

Guaranteed top prices and immediate payment for feather shipments. Free tags. Ship to this old reliable firm. Used feathers—send sample for best price. No handling or commission charge. Progress Feather Co., 657 W. Lake St., Chicago, Ill.

FILM FINISHING

The Photo Mill. Immediate Service. No delay. Eight exposure roll developed and two prints from each negative 40c, or eight Jumbo Prints—35c. Single reprints 3c each; Jumbo Reprints 4c each. Write for complete price list and roll film mailers. The Photo Mill, Dept. 17, 1511 Hennepin, Minneapolis 3, Minnesota.

8 exposure rolls developed, printed on Genuine Moentone enamel Jumbo Size deckledged prints in beautifully bound Album 40c. 12 exposure 60c. Jumbo reprints 5c each. Free Beautiful illustrated photographic catalog. Moen Photo Service since 1898. 48 Moen Bldg., LaCrosse, Wisconsin.

Two "Everbrite" Prints from each negative on 8 exposure film, including coupon for choice of two plain or one colored framed enlargement, 40c. Reprints 3c each. Flash Foto Finishers, Box 1122-R, Minneapolis, Minn.

Two Sets Of "Deckledge" Prints with every eight exposure roll finished—40c. Very finest quality. "Deckledge" reprints 3c each. Jumbo reprints 4c each. Brown Photo Company, 1910-45 Emerson, Minneapolis, Minnesota.

Oversize Prints No extra charge. 8-exposure roll, 30c. 12-exposure, 45c. 16-exposure, 55c. Reprints oversize 4c. Finest quality. Mail Order Photo Service, Box 297, Watertown, Wisconsin.

Prompt Service. Finest Quality. Two Deckledged prints from eight exposure roll—35c (Trial Offer). Reprints 3c. For clear sparkling prints. Welch Photo Company, 2418-36 Penn, Minneapolis, Minnesota.

Only 25c for 8 beautiful enlarged prints from your roll or negatives. (Trial Offer) 16-50c. Quick Service. Money-back guarantee. Willard Studios, Box 3535N, Cleveland, Ohio.

16 Oversize Contact prints or 8 plastic bound superpak album jumbo prints from roll 35c.
Owl Photo Co., Weatherford, Okla.

12 Jumbos from any size roll developed 25c with this ad only.
E. Skrudland, Lake Geneva, Wis.

TRACTOR—AUTO PARTS

Buy Tractor Parts At Wholesale Prices! Free 116-Page Tractor parts Blue Book. Lists thousands of parts for most Makes and Models of Tractors and Implements. Special savings on accessories, farm equipment, tools. All Merchandise Brand New. Fully Guaranteed. 26 Farm Stores Serve The Nation. For Free Catalog send postcard to Tractor Supply Co., 2684 North Halsted, Chicago 14. Limited quantity available. Write Today!

Tractor Parts. Largest combination of New and Used parts in the country. Free 1954 Catalog. Central Tractor Parts Co., Des Moines 3, Iowa.

Advertising in Successful Farming is carried under the guarantee on the index page.

POULTRY—CHICKS—DUCKS—EQUIPMENT

10 Free Chicks with every 100 ordered, no additional cost, if order is placed before April 1. Sensational cut price values! Egg bred chicks. U. S. approved pullorum clean. 28 pure and cross breeds. Pullets or cockerels. Low as $8.95—100. Mt. Healthy special egg breeding builds healthy chicks that really pay off. Both on the market and at the nest. Many matings sired by R.O.P. (Record of Performance) males. 100% live delivery. Order early. Save money. Mt. Healthy Hatcheries, Dept. SF, Mt. Healthy, Ohio.

Neuhauser Chicks. Kind you need for high egg production. Royal mating chicks, 200-343 egg ROP sired in White Leghorns, White Rocks, New Hampshires, Barred Rocks. Improved for years, direct breeding of famous trapnest-pedigree strains. Over one-third of our matings qualify as Royals. All Chicks U. S. Approved-Pullorum clean. Free catalog. Write: Neuhauser Hatcheries, Inc., Napoleon, Ohio.

Wholesale prices, thousands weekly. Assorted Heavies $6.45. White, Barred Rocks, Hampshires, Wyandottes, Reds, Leghorns, Minorcas, Austra-Whites, hybrids, $7.45; Leftover surplus broiler Chix $1.99 also other assortments $2.95, $3.95, $4.95, $5.95 up to $12.95 surplus pullets, our choice 26 breeds or sex. Send money or we ship COD. 100% alive FOB. Catalog.
Hi-Grade Chicks, Deepwater, Missouri.

Famous Parmenter Strain Rhode Island Reds. Foundation stock direct from Parmenter Farms, Franklin, Mass. ROP records to 325 eggs. Chicks from our U.S. Approved-Pullorum Clean flocks grow fast, mature early into exceptionally big brown egg layers. Prepare for big cash profits—order early at reasonable prices. Catalog Free. Central Farms Hatchery, Box 8-4, Zeeland, Michigan.

Brower Feed Mixer Saves You $8-$16 a ton by mixing your own feeds. Perfect mixes in ten minutes. Five sizes, 700 to 4000 pounds capacities. World's largest seller—over 9000 in use. Sold on 30 day trial. Priced low, cash or time payments. Free Catalog. Brower Manufacturing Co., Box G76, Quincy, Illinois.

67 Rare Varieties Baby Chicks, Eggs, Breeding Stock. Ducks, Geese, Turkeys, Chickens, Bantams. Free handsome catalogue, colored pictures, showing Lakenvelders; Polish; Hamburgs; Andalusians; Sussex; Turkens; Giants; Cornish; Houdans; Langshans; Minorcas; Wyandottes; Rocks; Australorps; Buttercups; Anconas; Orpingtons; Reds; Brahmas; Baby Bantams. 10 varieties Crossbreds. Murray McMurray, Box B21, Webster City, Iowa.

'Kirby Started Chicks'. Save Labor, Time, Early Losses! Order your chicks Started 3 to 6 Weeks from our Big, Modern Broodery. R.O.P. Sired in 6 leading breeds. Also Turkey Poults. Approved. Pullorum Clean. Free Illustrated Catalog.
Kirby Hatcheries, Dept. 29, Urbana, Ohio.

Broiler Chicks Pullorum Clean. All Breeds Mixed, no sex guarantee, $4.95 per 100. Heavy Breed cockerels our choice $5.95. Heavy, Mixed Chicks $6.95. Leghorn Cockerels $2.95. Shipped C.O.D. plus postage. Order direct. Prompt Shipment. Central Farms Hatchery, Box 8-13, Zeeland, Michigan.

Started Pullets—Hi-Egg Hamps. 3 to 4 weeks old. Heavy Layers of large eggs. A real money making egg strain. Guaranteed 90% pullets. Only $21.90 per 100 fob. Rush your order now. Pilot Grove Hatcheries, Inc., Box 302, Pilot Grove, Missouri.

19 Million Eggs Annually produced on our farms. We've got high producing R.O.P. white Leghorns. Bred for 27 years. U.S. Certified. Pullorum clean. Three matings offered. Free 16-page catalog—tells story. Creighton Brothers, Warsaw 15, Indiana.

Berry's Chicks On Shares. Pay for chicks after six months. Liberal plan helps you make good profits. Purebreds, Crossbreds and hybrids. U. S. Approved-Pullorum Clean. Write today for money making proposition.
Berry's Farms, Box 325, Quincy, Illinois.

Write for Brower's Big Free Poultry and Livestock Equipment Catalog and Guide. Chock-full valuable poultry raising information. World's Largest Line poultry supplies, battery broiler plants. Lowest prices. Brower Mfg. Co., Dept. G57, Quincy, Illinois.

Rocks, Reds, Hampshires, Wyandottes, $9.95; pullets $14.95; Leghorns, Austra-Whites, Minorcas, $9.95; pullets $18.95; Heavies $8.95; Leftovers $4.95; surplus $3.95, as available. 26 breeds. Capons, Started Pullets FOB. Alive. COD. Catalog.
Bush Hatchery, Clinton, Missouri.

Surplus Assorted Chicks. No breed or sex guarantee. Rocks, Reds, Australorps, Crosses, Hybrids, or any other breed available. $4.95 per 100; $47.50 per 1,000. Live Delivery. Catalogue Free. Tilmer Thompson Hatchery, Elmore, Minnesota.

Rainbow's Pot-O-Gold Chicks US Approved Pullorum Clean Leghorns, New Hampshires, Rocks, Giants, and others. Also, Ducklings. Liberal Guarantees. Early orders receive discount. Write for Literature and prices. Rainbow Hatchery, New Washington, Ohio.

Tulip City Giant White Pekins. Growers everywhere prefer these choice Ducklings, larger body and faster growth. Inquire now; Free Catalog and prices. Tulip City Duck Farm, Dept. 20, Holland, Michigan.

America's leading pedigree-blooded strains at lowest prices. Leghorns, Rocks, Production Reds, Hamps, other popular and rare breeds. Egg and broiler crosses. Catalog Free.
Mathis Farms, Dept. 16, Parsons, Kansas.

Hampshires, Wyandottes, Reds, White, Barred Rocks $8.90, pullets $13.90. Big Leghorns, Austra Whites $8.90, pullets $16.90. Heavies $7.90, Mixed $6.90, Leftovers $4.90, surplus $2.90. Catalog—
Clinton Chick Store, Clinton, Missouri.

Leftovers $1.95, Heavies $5.95, Rocks, Reds, Hampshires $7.85, Surplus Pullets $12.95, Mixed $2.95, our choice, 26 breeds, Sex. No culls, Cripples, COD. FOB. Everybodys Chicks, Box R433, Clinton, Mo.

Wyandottes, Reds, White, Barred Rocks, Hampshires $8.95, pullets $13.95, Leghorns, Austra Whites $8.95, pullets $16.95, Heavies $8.95, Mixed $6.95, Leftovers $4.95, Surplus $2.95. Catalog—
Thompson Chicks, Springfield, Missouri.

'Kirby' Mammoth White Pekin Ducklings—25—$8.45; 50—$15.95; 100—$29.90; 500—$144.50, Prepaid. Pullorum Clean. Order from ad or request Catalog.
Kirby Hatcheries, Dept. 65, Urbana, Ohio.

Profitable "Dutch Boy" Chicks. Reap big profits raising Janssen Large Leghorns, White Rocks, Broiler Crosses. Literature free. Janssen Farms, Box 8-180, Zeeland, Michigan.

Sheppard's "Famous" Anconas. First at world's greatest shows twenty years. Champion layers, large eggs. Reduced prices. Catalog free.
Cecil Sheppard, Berea, Ohio.

$7.95 For 25 Giant Mammoth White Pekin Ducklings. Free Catalog. Rouens, Buffs, Indian Runners, Goslings, Turkeys, Guineas.
Stromberg Hatchery, Fort Dodge 3, Iowa.

Give Successful Farming, and your friends will be reminded of your thoughtfulness each month throughout the year.

OLD GOLD — JEWELRY

Highest Cash Paid for Old Gold, Broken Jewelry, Gold Teeth, Watches, Diamonds, Silverware, Spectacles. Free Information. Satisfaction Guaranteed. Rose Smelting Company, 29-D East Madison, Chicago.

HOBBIES

Leathercraft. Metal Tooling. Textile Painting, Beadcraft, Shellcraft . . . many other crafts. Fun, easy, profitable! Free, big, illustrated catalog. Write today.
Kit Kraft, Dept. AJ53, Hollywood 46, Calif.

Decorating advice. Stores offering **Successful Farming's** home planning service are listed on page 182. Visit starred store nearest you for help with decorating problems.

CHICKS Very Special $3.90

Hayes Grade AA chicks! Excellent quality—both for meat and eggs. Bred for high livability. Grow faster, live better, produce more eggs. 95% sexing guarantee. Cash in full—we pay postage. C. O. D.'s, you pay postage. ORDER TODAY. Prices subject change without notice. Orders under 100, add 1¢ per chick. AAA Grade chicks—from our best laying flocks only 4¢ per chick more, all AAA grade losses first 2 weeks replaced free. **See Below**

GRADE AA	Str. Hatch Per 100	Males Per 100	Pullets Per 100
Austra X Whites, Min X Leg. White Leghorns	10.90	4.90	24.90
New Hampshires, Barred, White Rocks, White Wyandottes, S. C. Reds	10.90	10.90	15.90
Mixed Heavies. No Leghorns.	8.90	7.90	13.90

Special: Wh. Rocks, Barred Rocks, N. H. Reds—our choice of breed and sex, per 100 . . . . **7.90**
Light breeds for broilers, mostly males, per 100 . . . **3.90**
Free Circular. Send today.

SCOTT HAYES CHICKS, Order Office
Dept. 129, Vandalia, Ill., Omaha, Nebraska

DANISH BROWN LEGHORNS

Phenomenal laying chicken famous as Europe's "Egg Queen". Lays large snow-white eggs. Extra sturdy. Lays early and all year. Catalog Free.
Smith Chickeries, Dept. 202-T, 410 W. Monroe, Mexico, Mo.

KIRBY TURKEY POULTS

Broadbreasted Bronze Poults hatched from James Bar-Nothing and Browning U.S. Certified bloodlines. Beautiful market finish, uniform big size—excellent livability. New Exclusive 'RiverVens' Broad-Whites. The White Turkey with Bronze shape and size. Beltsville Whites for family size or Turkey Broilers. Free Catalog.

KIRBY HATCHERIES, INC. DEPT. 43 URBANA, OHIO

RAISE RABBITS

Make money. Get starting stock from me. Pay later from your profits. Send 25 cents for market information, plans for housing, prices and my plan for furnishing starting stock. **B. Johnson, Box 694, Kansas City, Mo.**

FARM TESTED CHICKS

It Pays you to Buy Quality Chicks

BIG LARGE TYPE White Leghorns, Austra-Whites, White Rocks, New Hampshires, Production Reds — **10.95** per 100 fob St. Run

White Leghorn, Austra-White Pullets . . . . **20.95** per 100

Production Reds, New Hampshires, White Rock-Pullets **16.95** per 100

Broiler cockerels $2.95. Heavy breed cockerels $9.95. Asst. Cockerels $4.90. Order from this ad. Free literature.
QUALITY HATCHERY, Box 431-SF, Clinton, Mo.

JULIAN'S FAMOUS CHICKS

For Greater Profits – Champion Bloodlines – U. S. Approved Assorted Chicks. Pullorum Passed. Bloodlines as high as 346 egg in our best grade Leghorns

AAA Cochran–Hanson Strain WHITE LEGHORNS, Legshires, Brown Leghorns, AUSTRA-WHTS., Hamp-Whts. — St. Run **8.90** per 100; Pullets **14.90** per 100; Cockerels **2.90** per 100

AAA WHITE ROCKS, NEW HAMPSHIRES, PRODUCTION REDS — St. Run **8.90** per 100; Pullets **12.90** per 100; Cockerels **7.40** per 100

AAA 3-4 week PULLETS **28.90** per 100

Free Catalog. Big Discounts. Air Shipments from coast to coast. Breeding certificate sent with best grade. fob.
JULIAN'S FARM HATCHERY Box 151-SF, Clinton, Missouri

Farmer's Trading Center

Advertisements using illustration or display (large) type, $7.00 per agate line. Available to advertisers who make a mail offer of merchandise (including poultry, livestock, pet stock) or services (schools, etc.) at a stated price, or offer a mail-order catalog. Word classified (no illustration or display type)—14-word minimum—all classifications—90 cents a word. Write Successful Farming, Des Moines 3, Iowa.

AGENTS WANTED

Run a Spare-Time Greeting Card and Gift Shop at home. Show friends samples of our new 1954 All-Occasion Greeting Cards and Gifts. Take their orders and earn up to 100% profit. No experience necessary. Costs nothing to try. Write today for samples on approval. Regal Greetings, Dept. 168, Ferndale, Michigan.

Make up to 150% profit selling finest Everyday Greeting Cards. New $1.00 Assortments, 21-Card Boxes, Make-It-Yourself Kits, 100 fast-sellers. Extra Gift Bonuses! Assortments on approval. Stationery samples Free! Creative Cards, 2505 Cermak, Dept. 506-H, Chicago 8.

Need More Money To Live On? Increase your weekly income $20 to $25 or more in spare time. Supply Rawleigh Products to Consumers. Also openings for full time Dealers. Write Rawleigh's, Department C-DD-SHW, Freeport, Ill.

Men-Women! Double your money selling Big "Bargain 5 Bottle Assorted Flavors Deal." Premium deals, 200 household products. Particulars, Sample Product Free! J. W. Gibson Company, Dept. 411, Indianapolis 6, Indiana.

Strange "Dry" Window Cleaner. Sells like wild. Replaces messy rags, liquids. Simply glide over glass. Samples for Agents. Kristee 51, Akron, Ohio.

Raise Money Quick—California sweet smelling beads sell on sight. Big profit. Particulars free. Mission, 2328B West Pico, Los Angeles 6, California.

Cleans Walls Without "Dough". New invention. Lightning seller. Walls gleam with brightness. Samples for Agents.
Kristee 54, Akron, Ohio.

Agents to sell special fertilizers to farmers full or part time, good income.
P.O. 482, Marion, Ohio.

Dealers or Agents to sell Adjustable High-lifting, Self-closing Farm Gate Hinges.
Magic Hinge Co., Bonilla, S. Dak.

Sell New Automatic Floor Waxer. Trigger on Handle. Retails $2.95. Your profit 125%. Write
Smith, Inc., Greenfield 7, Mass.

DOGS—PETS—SUPPLIES

Genuine English Shepherd and Collie pups—guaranteed heeldrivers—(no fooling) year's trial—training instructions—(50,000 satisfied customers) males—females—spayed females—$15.00. (Distemper vaccinated).
Emil Runft, Reinbeck, Iowa.

Creekside Eng. Shepherd pups. $12. Guaranteed heelers, watchdogs, happy guarding the baby. Training instructions. Few older partly trained $25.
Creekside Kennels, Beardsley, Minn.

Genuine English Shepherd pups—(Distemper Vaccinated). Guaranteed Heeldrivers. Year's Trial. Training Instructions. Males, Females, Spayed Females.
Highview Farms, Cedar Falls, Iowa.

Rat Terrier Puppies—small type, and large type for squirrels. Send dime for photos and literature.
Kenny's Kennels, St. John, Kansas.

"PR" German Shepherd Police Pups. Registered. Protect your property. Good watch dogs. Send 25c for pictures.
H. Schumacher, Ottertail, Minn.

English Shepherds—Border Collie Puppies. All ages, both sexes, choice colors, faithful workers, satisfaction guaranteed.
Fairmount Farms, Cedar Falls, Iowa.

Want to buy good collie or shepherd puppies. Dept. G. Box 777, Des Moines, Iowa.

COONHOUNDS

For Sale, Hunting Hounds: Coonhounds. Combinationhounds, Foxhounds, Rabbithounds: Exceptional Game Finders, Black and Tans, Redbones, Blueticks, Redticks, Spotted etc. Sold cheap. Trial. Pictures Literature Free.
Dixie Kennels, D10, Herrick, Illinois.

Coonhounds, Combination Hounds, Foxhounds, Rabbit and Beagle Hounds. A Specialty. Puppies all breeds, price reasonable. Free literature and pictures. Trial. Raccoon Mountain Kennels, Box 268, Albertville, Ala., Dures Thomas, Owner.

Business firms—write Successful Farming for details about classified advertising.

EDUCATION

Complete Your High School at home in spare time with 57-year-old school. Texts furnished. No classes. Diploma. Information booklet free. American School, Dept. X330, Drexel at 58th, Chicago 37, Illinois.

Make Up To $50-$60 Week as a Practical Nurse, Nursing Aide, or Infant Nurse. Learn quickly at home, spare time. Booklet free. Chicago School of Nursing, Dept. F-2, Chicago.

Be a Real Estate Broker. Study at home. Write for free book today. G.I. Approved. Weaver School of Real Estate, Dept. SF, Law Bldg., Kansas City, Mo.

High School-No Classes. Study at home. Spare Time. Diploma awarded. Write for Free Catalog HAO-35. Wayne School, 2527 N. Sheffield, Chicago 14, Ill.

EMPLOYMENT

Automatic profits with sensational new line Lingerie, Hosiery, Blouses, Anklets, Men's and Children's wear, etc. Complete line. Every item finest, guaranteed quality with one or more self-selling, exclusive features. Free outfit includes sample. American Mills, Dept. 423, Indianapolis, Ind.

Make Money Introducing World's cutest children's dresses. Big selection, adorable styles. Low prices. Complete display free. Rush name.
Harford, Dept. L-3341, Cincinnati 25, Ohio.

A dress-lingerie shop in your home. No investment. Good commissions. Write for Sample Book. Modern Manner, 260 YK Fifth Avenue, New York.

Amazing Extra-Money plan gives you gorgeous dress without penny cost. Rush name today, with dress size.
Harford, Dept. L-335, Cincinnati 25, Ohio.

HUNTERS—TRAPPERS

Raise Mink: Free booklet, pen plans, inside "secrets," feed, care. Mink are money makers. Investigate today.
Lawrence Molgard, Brigham City 9, Utah.

FARM EQUIPMENT

10c brings instructions in hydraulics in farm equipment. Free Welder Plan included. Also catalog listing bargains in build-yourself welder kits, parts, and hydraulic kits. Send Dime Today.
LeJay 560, Minneapolis, Minn.

Protect yourself against power line failure with Katolight AC generator which will provide AC current at 110-120 volts. Available either with engine drive or for tractor drive.
Katolight, Mankato, Minnesota.

Free milking parlor plans show money-saving ways to modernize your milking operation. Save manpower, increase dairy profits. Write
Louden, Dept. SF-140, Fairfield, Iowa.

Farm, Poultry, Lawn Fence, barb wire, posts, gates, irons, roofing, farm supplies. Write for low prices. Interlocking Fence Co., Box 35, Morton, Ill.

Wire Winder—Avoid barbed wire entanglements, use a tractor powered wire winder. Low Cost—Free Literature. Midwest Wire, South St. Paul, Minn. Dept. 18.

Concrete Blockmaker—Daily capacity 100 blocks. Complete Equipment $24.95. Write Jackson Manufacturing, Department SF, 1300 East 59th, Kansas City, Missouri.

Garden tractors—new—$99.00 complete. Also sickles. McLean Tractors, 324 W 10th, Indianapolis, Indiana.

VEGETABLE PLANTS

Get Free my 1954 price list on all Vegetable plants. Tomatoes, cabbage, onions, peppers, Sweet potatoes, and others.
L. P. Legg, Rebecca, Ga.

Asparagus Roots—Mary Washington 25 roots $1.25. Special prices on large orders. Add 25c postage outside Ohio.
Charles Nickels, Huron, Ohio.

Cabbage Onion Plants—Postpaid 500 Onion and 100 Cabbage $2.95. Your choice of varieties. Write
Farrier Plants, Route 5, Omaha, Texas.

---

67 BREEDS Baby Chicks, Eggs, Stock, Ducks, Geese, Turkeys, Bantams. All rare and common varieties. Free handsome, illustrated catalogue, colored pictures. Low prices.
MURRAY McMURRAY, Box B12, Webster City, Iowa

LARGE WHITE LEGHORNS
Pullets 13.90 per 100 | Cockerels 1.99 per 100
Also A-Whites, N. Hamps, W. Rks. U.S. Approved & Passed;
Special Low Prices On Assorted
FREE CATALOG
ORTNER FARMS BOX 413, CLINTON, MO.

PEDIGREED SINCE 1915
PARMENTER REDS Inc.
MAKE POULTRY PAY
Proven profit producers. Excellent layers of many large, good quality eggs. Mature early with top feed efficiency. PARMENTER REDS—SEX-LINK CROSS—LEGHORN-RED CROSS—SILVER CROSS and BUFFS.
Write for FREE descriptive catalog and ORDER NOW.
PARMENTER REDS, INC.
465 King Street FRANKLIN, MASS.

KEEP YOUR DRAIN-TILE *Open*

NEW, INEXPENSIVE FARM-ROD Runs by TRACTOR TAKE-OFF or HAND POWER
Cleans Field Tile, Septic Tank Laterals, and Other Underground Pipes
NO UNNECESSARY DIGGING
FARM-ROD cleans field tile, septic tank laterals, irrigation lines, and other underground pipes of roots, grease, mud, silt and other debris . . . right from your tractor seat. Cleans small lines, large lines, short lines, long lines. Quickly pays for its low cost. Lasts years. No solicitors.
ROTO-ROOTER CORP., Dept. S-19
301 University Ave. Des Moines, Iowa

PURE BRED CHICKS
They Live. 97.3% Livability on 44,500 chicks reported to Michigan Poultry Improvement Association by customers. Breeding selected for egg, meat production characteristics. U. S. Certified. Pullorum Clean. Large White Leghorns, Heavy Breeds, Cross breeds. Turkeys. Early Order Discounts. Free Catalog.
Silver Ward Hatchery, Box 31, Zeeland, Michigan

CHICKS Very Special $3.90
Hayes Grade AA chicks! Excellent quality—both for meat and eggs. Bred for high livability. Grow faster, live better, produce more eggs. 95% sexing guarantee. Cash in full—we pay postage. C. O. D.'s, you pay postage. ORDER TODAY. Prices subject change without notice. Orders under 100, add 1¢ per chick. AAA Grade chicks—from our best laying flocks only 4¢ per chick more, all AAA grade losses first 2 weeks replaced free. See Below

GRADE AA	Str. Hatch Per 100	Males Per 100	Pullets Per 100
Austra X Whites, Min X Leg. White Leghorns	10.90	4.90	24.90
New Hampshires, Barred, White Rocks, White Wyandottes, S. C. Reds	10.90	10.90	15.90
Mixed Heavies. No Leghorns.	8.90	7.90	13.90

Special: Wh. Rocks, Barred Rocks, N. H. Reds—our choice of breed and sex, per 100 . . . . . . 7.90
Light breeds for broilers, mostly males, per 100 . . . 3.90
Free Circular. Send today.
SCOTT HAYES CHICKS, Order Office
Dept. 129, Bloomington, Ill., Minneapolis, Minn.

HALL BROS. *Chicks*

PROVEN PROFIT PRODUCERS
SEND for FREE 32 page Catalog and Laying Contest Records.
HALL BROTHERS HATCHERY, INC.
Box 24 Wallingford, Conn.
WELL BRED FROM WELL BREEDERS

STROMBERG WHITE LEGHORNS

BABCOCK STRAIN—the outstanding LARGE TYPE White Leghorn! Big producers. Large white eggs, exceptional layers up to 11 and 12 months. Danish Brown Leghorns, Anconas, Rhode Island Reds, etc., too. Also 3 to 4 week olds. Catalog FREE.
STROMBERG HATCHERY, Fort Dodge 3, Iowa

MAKE *More Money* WITH THESE Easy Tests!

Double Your Yield
Take in more money this year by getting more bushels or tons to the acre. That's Dept. of Agriculture advice. Hundreds of thousands of farmers are doing this by soil testing. So can you!

You'll do even more than get bigger crops—you'll build up your soil for years to come instead of draining its vitality. ***In just two weeks your Sudbury Soil Test Kit will pay for itself many times over.***

TEST YOUR SOIL

Save Money Too!
You'll save up to $15 an acre on fertilizer. Every $1 spent pays up to 12 times as much in extra yield. So reliable it is used by county agents, ag colleges.

Over 400,000 Now in Use

Easy As Reading A Thermometer
No Knowledge of Chemistry Needed

Takes only 10 minutes, costs less than 10¢ a test. Shows right formula for each field: nitrogen, phosphate, potash, and lime. Lifetime welded steel chest with handle. Makes hundreds of tests. **Only $29.95!**

SEND NO MONEY—We'll mail your Kit C.O.D. plus postage, if desired.

FREE Or send check and we'll prepay, saving you $1.91 to $3.55 postal fees and include valuable free book, "Our Land and Its Care."

Easy Payments If you wish, let the money you save on fertilizer pay for your Kit—see coupon.

BETTER CROPS *Guarantee*
Your money back if you don't get bigger yields!

Sudbury Laboratory, Box 335, South Sudbury, Mass.
Send me the Sudbury Soil Test Kit as marked below.
☐ Enclosed is $29.95; send Kit postpaid ☐ Send Kit C.O.D. $29.95 plus postage.
Name . . . .
R. D. or St. . . . .
P.O. . . . . Zone . . . . State . . . . .
☐ Send on Easy Payment Plan—I'll pay mailman $4.95 plus postage, then 4 monthly payments of $6.75 each.

Dealers: Write for Special Offer

BUSH'S WONDERLAY CHICKS

More eggs, more profit. Egg Record Breeding Bloodtested. Famous over 300 egg bloodlines, bred by Mother Bush. 50 Million chicks since 1919. Low prices on Bush's assorted. F. O. B. 100% Alive.

AAA egg bred Big Bush White, Buff, Brown Leghorns and Minorcas — Unsexed $8.85, Pullets $14.85, Ckls. $2.85

AAA White, Barred Rocks, Austra Whites, Hamps, Wydts. Hamp-Shires — Unsexed $8.85, Pullets $12.85, Ckls. $7.35

3 to 8 wks. started pullets $26.95 up fob Express. Capons 49c up fob Express

Get free catalog, full information gives our terms, discounts, prices, guarantee, special offers, many breeds, grades, capons, started pullets and our order booking suggestions. We give extra chicks, order direct, use postcard, read our catalog. Big gift, discount offers, 100,000 customers, 50,000,000 chicks since 1919.
BUSH HATCHERY, Box 433, SF2, CLINTON, MISSOURI

FARM SEEDS AND NURSERY STOCK

Sensational F2 of Hybrid Climbing Tomato. All the big, red, ripe, tomatoes a family of six can eat. They bear until frost. Send $1.00 for 12 of these large wonderful plants, postage prepaid by us. State when you want shipment made. Free instructions how to grow and our New 1954 Calendar Catalog. Order Today. P. D. Fulwood Company, Dept. 118, Tifton, Georgia.

Beginner's Luck Strawberry Kit. 25 Certified June bearing strawberry plants plus the fascinating new How-To Book On Strawberries plus, beautiful, full color strawberry catalogue. All you need, all you need to know—to grow strawberries for home use, profitable home business. Order complete Kit today, only $2.50 postpaid in U. S. The Berry Patch, Dept. 8C, Honeoye Falls, N. Y.

Free Baldwin's 1954 Catalog. Fruits, shrubs, roses, flowers. Guaranteed stock, low prices. 60 years experience. Best strawberries, red and black raspberries, boysenberries, blueberries, grapes, asparagus, tree fruits, nut trees, dwarf fruit trees. Special offers, cash discounts. Color illustrated catalog free. Write today. O. A. D. Baldwin Nursery, Box 164, Bridgman, Michigan.

Roses, 2 Yr. Field Grown Low As 25c. Flowering shrubs, evergreens, shade trees 25c up. Fruit trees low as 29c. Nuts, blueberries, strawberries. Grapevines 10c. Quality stock can't be sold lower. Write for Free Color catalog and $2.00 Free bonus Information. Tennessee Nursery Co., Box 112, Cleveland, Tenn.

Hardy Reclaimed Kansas Alfalfa Seed—Certified Buffalo, Ranger, also Red Clover, Sweet Clover, Ladino Clover, Brome, Fescue, Timothy. Save money—send postal today for catalog, samples, and lowest prices. Quick service, satisfaction guaranteed. Serving growers over 50 years. Jack Bowman, Box 656, Concordia, Kansas.

Peach, Apple Trees, Low As 20c. Cherries, Pears, plums, nuts, strawberries, Grapevines 10c. Roses, evergreens, shrubs, shade trees 25c up. Quality stock can't be sold lower. Write for Free Color catalog and $2.00 Free bonus information. Tennessee Nursery Co., Box 110, Cleveland, Tennessee.

Patronize Successful Farming advertisers. Their products are backed up by our advertising guarantee.

Blooming Tomato Plants—Be the first to have large, red, early Tomatoes in your section. Send $1.00 today for 12 of these wonderful plants. Postpaid. State when shipment is wanted. Culture pleasure Catalog free. P. D. Fulwood Company, Dept. 118, Tifton, Georgia.

Buy direct and save—Hardiest, most drought resistant, highest yielding, new Hybrid Ranobling Rhizoma Alfalfa. Cossack, Ladak and Ranger Alfalfa; improved pasture and hay grasses. Lowest prices in 21 years. Sam Bober & Sons, Box 751 D, Rapid City, S. Dak.

Evergreen Tree Seedlings. Transplants For growing Ornamentals, Hedges, Windbreaks, Christmas trees. Quality stock low as 2c on quantity orders. Free list and planting guide. Suncrest Evergreen Nurseries, Dept. SF, Johnstown, Pa.

Strawberry Plants. Certified Blakemore, Dunlap and Premier 50-$1.00, 200-$3.00, 500-$6.50, 1000-$12.00 postpaid. Other varieties including everbearing. Also Grapes, Raspberries, Blackberries, Rhubarb, etc. Ideal Fruit Farm, Stilwell, Okla.

Special Offer Certified Strawberry Plants 50 Superfection Everbearing, 100 Giant New Robinson—both for $3.00 Free colored catalog (fruits, flowers) featuring 17 top-notch Strawberry varieties.
The Rider Nurseries, Farmington, Iowa.

Strawberry Plants—Allen's 1954 Berry Book tells best varieties for home and market, and how to grow them. Free Copy. Write today W. F. Allen Company, 25 Pine Street, Salisbury, Maryland.

Free Sample Campbell's Gro-Green Liquid Fertilizer. Makes 1 gal. ready to use fertilizer—enough to feed 25 house plants 6 months.
H. D. Campbell Co., Rochelle 10, Illinois.

Watermelon Seed: Largest growers of watermelon seed in the state both Certified and non-certified. 66 leading varieties. Beautiful Catalogue free. Wilhite Farms, Poolville & Weatherford, Texas.

50 Cabbage Plants and 100 Onion Plants All Postpaid for $1.00. Catalog of all Vegetable Plants sent free. P. D. Fulwood Company, Dept. 118, Tifton, Georgia.

Free—1954 Vegetable Garden Guide. Profit by using our hardy field-grown plants. Satisfaction Guaranteed. Piedmont Plant Co., P. O. Box 684, Greenville, S. C.

20 Million Trees a Year. We specialize, offer best values direct from grower. Free catalog, write today. Musser Forests, Inc., Box 23-C, Indiana, Pa.

Write for free Gladiolus Catalogue. Prices are very, very reasonable.
George Needham, Saline, Michigan.

Fascinating—Story-telling Garden newspaper packed with information—Free—Send stamp.
Tobe's, Niagara-on-the-Lake 13, Canada.

Write For Your Copy of Catalog of Our World-Famous Chrysanthemums. Wonderland Nurseries, Ellerson 21, Virginia.

African Violets. Many new and colorful varieties. New price list available. Write Hirt's Greenhouses, Strongsville, Ohio.

Free Catalog Guide to Special Vegetable Plant Bargains. Write for yours today.
Wright Plant Company, Omaha, Texas.

Genuine Empire Birdsfoot Trefoil Seed $1.75 per pound FOB for orders of ten pounds or more. Guaranteed free of bedstraw. C. Crowe, Dryden, New York.

Strawberry Plants—All leading varieties. High grade, certified stock. Write for catalog and prices. J. H. Shivers Plant Farms, Box 8-54, Allen, Maryland.

Grass and Legume Seeds—Write today for down to earth prices. Midwest's Leading Grass Seed Specialist. Miller Seed Co., Box 1823, Lincoln, Nebraska.

American Ginseng The cash crop. Free how to grow, where to sell, also seed. Smoky Mountain Ginseng Gardens, Asheville, N. C., Box 861.

Strawberry Specialists. 53 varieties. New giant 3 inches across. New everbearer. Nice plants. Test plants free.
Pennhobo Farms, Carpenter 2, Ohio.

World's Most Beautiful gladiolus, giants and miniatures. Tuberous Begonias, Delphinium, Amaryllis, Peonies. Bargain collections. Free catalog.
Lins Gladiolus, Cologne, Minn.

TURKEYS

Announcing Nicholas Strain Broad Breasted Bronze! Available at Central Farms. Real breeding that gives you heavier weights, early maturity, broader breasts that make you bigger cash profits. Make yours Nicholas from Central Farms in 1954. Also Griffin Broad Breasted Bronze, Beltsville Whites, New Broad Breasted Whites. U. S. Approved-Pullorum Clean. Free Catalog. Central Farms Hatchery, Box S-11, Zeeland, Michigan.

Raise 'Kirby' Turkey Poults for fast growth, top market quality. Big Broad-breasted Bronze—your choice breeding from first generation Jones or Browning U. S. Certified bloodlines. New Exclusive "RiverVene" Broad-Whites. The white turkey with bronze shape and size. Also Beltsvilles. Approved-Pullorum Clean. Prices right. Beautifully illustrated catalog. Write today!
Kirby Hatcheries, Dept. 49, Urbana, Ohio

Silver Ward Poults Live. 97.8% Livability on 146,536 poults reported by customers to Michigan State Poultry Improvement Association during 1953. Griffin Wagon Wheel Broadbreasted Bronze, Broadbreasted Whites, Beltsville Whites. Truck Delivery, Early Order Discounts. Free Catalog. Write Silver Ward Hatchery, Box 314, Zeeland, Michigan.

Raise Turkeys the New Way. Write for free information explaining how to make up to $3,000.00 in your own backyard. Address National Turkey Institute, Dept. 4, Columbus, Kansas.

Raise Profitable U. S. Pullorum Clean Janssen "Dutch Boy" Poults. Bred to mature faster on less feed for bigger profits. Hatching now. Janssen Farms, Box S-160, Zeeland, Michigan.

BUSINESS OPPORTUNITIES

Cost Of Things Going Up faster than your income? You can make more full or part time as a Rawleigh Dealer. Write for full particulars. Rawleigh's, Department C-RR-SHW, Freeport, Ill.

Free Particulars, 101 Profitable Spare Time "Home Business Enterprises", with wholesale sources Thousands items. Cottage Industries, 2804-E, Hanover, Omaha 12, Nebr.

Moneymaking Opportunities. Hundreds to choose from. Read World's Biggest Classified Medium. Free copy. Popular Mechanics Classified, 207 East Ontario, Chicago 11.

Buy Wholesale—Thousands Nationally advertised items. Stretch your income. Save—Make Money!
Durex Co., Box 672-S, Chicago 90, Ill.

BEES AND BEE SUPPLIES

Bees Insure Better Crop Pollination. Profitable side line. Send $1.00 for book, "First Lessons in Beekeeping" and six months subscription. Free literature. American Bee Journal, Box M, Hamilton, Illinois.

FLOWERS—BULBS

Gladiolus, 125 Giant Exhibition Varieties, Dahlias, Tuberous Begonias, Gloxinias, Lilies, Cannas. Money Saving Specials. Free Catalog.
Foley Gardens, Freeport, Illinois.

SALESMEN WANTED

Look Here! Wanted—Men to start in business on credit. Sell some 200 farm-home Products. Thousands of our Dealers now make quick sales, good profits. For particulars write Rawleigh's, Dept. C-192-SHW, Freeport, Ill.

Amazing NEW MILKER

1/3 OFF given farmers who write immediately

Write Today

- 1-2-3-4 RHYTHM MILKING ACTION . . . gets more milk . . . easier on cows
- SIMPLICITY . . . self-contained . . . more years of service
- CUTS MILKING CHORES IN 1/2 . . . milks faster, safer . . . easier to clean
- $50 WARRANTY of Increased Production and Better Milking

Don't decide on any milker at any price until you have the facts on the sensational advantages given by the new, improved GLOBE 1-2-3-4 Rhythm MILKER. Single or double milking units for any size herd.

FREE

World's Greatest MILKER story—low, direct-from-factory price and EASY TERMS. Write today.

GLOBE MILKER CO. Dept. A-2, 200 E. 1st St. Des Moines, Iowa

Keep *Successful Farming* coming your way. Each month in *Successful Farming*, you will find the kind of information that will help you increase your profits, make your farm work more convenient, and your farm living more comfortable.

MAKE MONEY with PLASTICS

MEN & WOMEN

Amazing new PLASTICS HOME CRAFT COURSE for MEN and WOMEN tells and shows how to make hundreds of fast selling Plastics products. All plastics and materials for 23 PROJECTS come with course. No special tools needed. Course pays for itself. Write for FREE booklet today!

INTERSTATE TRAINING SERVICE Dept. C-18-C Portland 13, Ore.

SUCCESSFUL FARMING

"Hey, look. Somebody's old report card."

25 for $5. TREES

3 to 5 year healthy selected trees, 6" to 16" tall. 5 each of: Colorado Blue Spruce, Norway Spruce, Austrian Pine, Scotch Pine, Douglas Fir. Postpaid at planting time. For Complete Evergreen Catalog write Box 23-C

MUSSER FORESTS, Inc. Indiana, Pa.

NEW TOWELS

LARGE SIZE 12 for $1.00

Assorted Colors. NEW—not Seconds. Supply limited so order NOW for guaranteed prompt delivery. Agents Wanted. Make Big Money.

TOWEL SHOP, Dept. 194, Box 881, St. Louis, Mo.

FREE BERRY'S NEW POULTRY BOOK

Gorgeously illustrated, describing DAY-OLD and 4-WEEK CHICKS, 50 varieties, sexed or unsexed. AMERICA'S FINEST; also Ducks, Geese, Guineas. ORIGINAL BERRY'S FARM, for over 50 years. Beautiful book and LOW PRICE LIST FREE, stamps appreciated.

BERRY'S POULTRY FARM, Box 104 Clarinda, Iowa

RAPID WIRE WINDER

Roll and unroll barbed wire with tractor power and speed. Heavy duty slip clutch . . . keeps wire tight. Collapsible spool. Fully guaranteed, Very Low Cost.

Write for FREE literature

MIDWEST WIRE & STEEL CO.
535 South Concord St.—Dept. A-26
South St. Paul, Minnesota

BROILERS $1.95 PER 100 | FRYERS $3.95 PER 100 | ROASTERS $6.95 PER 100

SEASONAL SURPLUS CHICKS! 100,000 weekly. U. S. Approved. Pullorum Passed. Fast developing broilers $1.95. Meat type early maturing Fryers (No Leghorns) $3.95. Large type choice Crossbred $4.95 per 100. Extra large, full breasted Hybrids $5.95 per 100. Heavy meat type Roasters $6.95. Daily shipments—C. O. D. plus postage. Livearrit L. Immediate delivery. A postcard brings 'em. Order Now!

White Feather Chicks, R-38, Box 446, Fairmount, Minn.

CLIP and MAIL

this ad with your name and address today. Receive FREE CHICK FEEDER, chick catalog, and biggest bargain offers in our 30 year history to acquaint you with Royal Chick quality. Mail today.

HAMBURG HATCHERY
Dept. SF-2 Hamburg, Iowa

SEND FOR FREE CATALOG OF TIME-SAVING FARM TOOLS

Keep your costly farm equipment in top shape—Snap-ons are the handiest time-and-money savers you could have on the farm! Highest quality professional tools you'll be proud to own. And they LAST . . . pay for themselves over and over again! Start building your own set with basic units—add others any time. Never sold in stores—direct from factory to you. Write today for free copy of the Snap-on catalog.

Snap-on Tools THE CHOICE OF BETTER MECHANICS

SNAP-ON TOOLS CORPORATION
8040-C 28th Ave., Kenosha, Wis.

HOW to BREAK and TRAIN HORSES

SEND FOR THIS FREE!

Make money. Know how to break and train horses. *Write today for this book FREE*, together with special offer of a course in Animal Breeding. If you are interested in Gaiting and Riding the saddle horse, check here ( ) *Do it today—now.*

BEERY SCHOOL OF HORSEMANSHIP
Dept. 283-D Pleasant Hill, Ohio

Your mail sales grow each time you Go Classified in Successful Farming.

Farmer's Trading Center

Advertisements using illustration or display (large) type, $7.00 per agate line. Available to advertisers who make a mail offer of merchandise (including poultry, livestock, pet stock) or services (schools, etc.) at a stated price, or offer a mail-order catalog. Word classified (no illustration or display type)—14-word minimum—all classifications—90 cents a word. Write Successful Farming, Des Moines 3, Iowa.

FOR FARMERS

New type emergency tire chains. Most convenient, sturdy. Farmer's friend snow, mud. Quick on. Guaranteed $5.98 set (4), prepaid. Name car, tire size. Kon-veen-yunt Chain Company, 1406 Cherokee Road, Richmond 25, Virginia.

Big Factory Catalog! Buy direct. Save Middleman's profits, hundreds of labor saving tools and equipment—tremendous savings. Send 10c Master Mechanic Mfg., Dept. C-37, Burlington, Wis.

Attention Cream Shippers! Ship us your cream. 59 years of honest, dependable service. Galva Creamery Company, Galva, Illinois, and Kansas City, Missouri. Peterson's Creamery, St. Paul, Minnesota.

Helm's Pullorum Clean Chicks. Nationally Famous Thirty Years. Immediate Delivery. High Official Contest Records. Free Brooding Bulletins.
Illinois Hatchery, Metropolis, Illinois.

Raise pheasants on $100 week plan. Little capital and space can make you independent. Free details. Great Central System, Columbus 8, Kansas.

"Big Barron Leghorns," World Famous Winners. Austra Whites, Leghamps, Hampshires, Delawares. Started Chicks. Cockerels, $1.98. Guaranteed.
Heiman's Hatchery, Montrose 16, Mo.

Goslings—New reduced prices. Advance order discount. Live delivery. Free catalog. Heart of Missouri Poultry Farm, Route 4D, Columbia, Missouri.

Special Sale U. S. Approved Pullorum Passed Chicks $2.90 up Started Chicks. Write for Free Circular.
Ideal Hatchery, Garden City, Missouri.

Chicks $6.50 100 COD. Reds, Rocks, Hampshires & Heavy Assorted. Price at Hatchery. L. Carter, Mingoville 5, Pa.

Special Offer: 100 big broiler chicks $1.95; 200 for $3.75. Quick COD shipments. Rauche Chicks, Kleinfeltersville 85, Penn.

Goslings, Ducklings. Several breeds. Guarantee Live Delivery. Wagner's Duck & Goose Hatchery, Sioux Falls, S. Dak.

STOCKMAN'S SUPPLIES

Horn Weights, 90c per pair postpaid. Made in 4 sizes—½ lb., 1 lb., 1½ lb.; and 2 lb. Tattoo markers $5.25, postpaid, includes set of numbers, bottle of ink, and full directions. We also carry complete line of ear tags, neck chains, veterinary instruments, supplies, serums, remedies. In fact, everything for the stockman. Write for free catalog.
Breeders Supply Co., Council Bluffs, Iowa.

Free 64 page catalog. Mastitis, abortion, other livestock diseases. Complete line products. Save money. Write Kansas City Vaccine Co., Dept. K, Kansas City, Mo.

Give Successful Farming, and your friends will be reminded of your thoughtfulness each month throughout the year.

LIVESTOCK

Want Big Profitable Hogs? Kind that has made ton-litters at 4 months of age. Larger at birth. Easier to raise. Get facts about Poland Chinas—the breed proven together in College cut-out tests. Write Poland China Record, 501 East Losey Street, Galesburg, Illinois.

"How To Break And Train Horses"—A book every farmer and horseman should have. It is free; no obligation. Simply address Beery School of Horsemanship, Dept. 203-C, Pleasant Hill, Ohio.

Holstein Or Guernsey Heifers all ages—shipped to you on approval from Wisconsin high production herds. Write H. P. Vanderburg, Box F, North Prairie, Wisconsin.

Wisconsin Holstein Cows, Heifers and Calves. Selected for production and type. TB and Bang's tested.
George Piper Farm, Watertown, Wisconsin.

Yorkshire Bred Gilts. Boars. Pigs. Unrelated. Supreme Breeder Award 1953 Illinois State Fair. Illustrated Circular. Yalehurst Yorkshire Farm, Peoria, Illinois.

McFarland Select Wisconsin Holstein Cows, Heifers and calves. TB and Bang's tested. J. M. McFarland & Sons, Watertown 11, Wisconsin.

MISCELLANEOUS

Parts for all Stoves, Ranges, heaters, furnaces. Fit guaranteed. Write for prices. Give make, model and part number. Omaha Stove Works, Dept. S, 1204 Douglas St., Omaha, Nebr.

Don't feed sparrows! Catch thousands with Original Vail Sparrow Traps. Big cash savings guaranteed. Free particulars. Rush! Farm Service Company, Box 7921, Chicago 1, Illinois.

Farmer's Wool made into blankets, batting, robes and yarn. Batting washed and recarded. Circular free. Montiello Woolen Mills, Montiello 9, Wisc.

Mailbox nameplates—Your name engraved both sides. Fits any mailbox. 16 letters. $2.00 Postpaid. Conrad Engraving, Box 356-C, Orrville, Ohio.

Send your raw wool to us for luxurious blankets and motor robes. West Texas Woolen Mills, 412 Main, Eldorado, Texas.

Stencil Pattern of your name with 1" letters for marking farm equipment .50c.
Posly, 19917 Alcoy, Detroit 5, Michigan.

Simplified analytics will teach you algebra instantly. $1 guaranteed.
Ziembal, 6123 Orchard, Dearborn, Mich.

SCHOOLS

Learn Auctioneering. Terms Soon. Free Catalog. Reisch Auction School, Box 850, Mason City, Iowa.

Patronize Successful Farming advertisers. Their products are backed up by our advertising guarantee.

PATENTS

Inventors: Learn how to protect your invention. Unless the inventor is familiar with patent matters, he should engage a competent registered patent attorney or agent to represent him. We are registered to practice before the U.S. Patent Office and prepared to serve you in handling your patent matters. "Patent Guide for the Inventor" containing detailed information concerning patent protection and procedure with "Record of Invention" form will be forwarded to you upon request—without obligation. Clarence A. O'Brien & Harvey Jacobson, Registered Patent Attorneys, 430-A District National Building, Washington, D.C.

Inventors—If you believe that you have an invention, you should find out how to protect it. The firm of McMorrow, Berman & Davidson is qualified to take the necessary steps for you. Send for copy of our Patent Booklet "How to Protect Your Invention" and "Invention Record" form. No obligation. McMorrow, Berman & Davidson, Registered Patent Attorneys, 1151 Victor Building, Washington 1, D.C.

Inventors: When you are satisfied that you have invented something of value write me, without obligation, for information as to what steps you should take to secure a Patent. Write Patrick D. Beavers Registered Patent Atty., 950 Columbian Bldg., Washington 1, D.C.

Inventors: Without obligation, write for information explaining the steps you should take to secure a Patent on your invention. John N. Randolph, Registered Patent Attorney, 237 Columbian Bldg., Washington 1, D. C.

"Inventor's Guide", and "Record of Invention" free on request. Frank F. Lederman, Registered Patent Attorney, 154 Nassau Street, New York City.

RABBITS

Start Right by Knowing Facts about rabbit raising. Illustrated booklet describing all breeds, Housing, Feeding, Breeding, Marketing. 48 pages 10 cents. American Rabbit Breeders Association, 40 ARBA Building, Pittsburgh, Pa.

Earn up to $400 monthly raising Angora or New Zealand Rabbits. Plenty markets. Particulars free. White's Rabbitry, 209 3rd Street, Jackson, Michigan.

Famous Angoras, Chinchillas, White Giants! World's most profitable rabbits. Finest—heavy-producing prize-winners. Catalog free.
S. Grinstends, Edwardsville, Illinois.

Rabbits: Standard Rabbit Journal, R-241-5, Milton, Pa. Year $1.00, sample dime. Beginners manual 25c.

DAIRY GOATS

Make Money raising goats—produce healthful milk. Monthly magazine $1 yearly; sample 20c. Dairy Goat Journal, Columbia A25, Missouri.

FARMS—REAL ESTATE

Special for the Cattleman—Stocked and equipped 460-acre ranch with 2 sets buildings, only $10,500. 200 tillable, 8 ponds, 3 springs, stream. Gravel road, milk route, ½ mile highway, mile fine fishing river, quick drive town. 6-room electric-lighted home, good 42-ft. barn, poultry facilities, another 6-room home, 50-ft. barn, granary, 60-ft. cattle shed, 40-ft. sheep shed. Really special at $10,500 including 15 cows, heifer, 2 calves, tractor, equipment, hay, feed, only $4,500 down. Possession at once. Big Spring catalog, free! Farms, ranches, country homes, resorts, businesses, 16 states. United Farm Agency, 2825-SF Main St., Kansas City 41, Mo.

New Strout Catalog. Just out! Farms, Homes, Businesses, 34 States, Coast-to-Coast, over 3000 bargains described. Mailed Free. World's Largest. 54 years service. Strout Realty, 20-R West Ninth St., Kansas City 5, Mo.

Canadian Farm Lands—Improved and Unimproved Lands. Good settlement opportunities on productive soil, reasonably priced. For free information write: Canadian National Railways, Room N100, Union Station, Winnipeg, Canada.

Farm-Ranch Opportunities. Favorable conditions. Washington, Minnesota, Montana, Idaho, Oregon, North Dakota. Literature, farm descriptions. Specify which state. J. W. Haw, 11 Northern Pacific Ry., St. Paul 1, Minn.

Modern Farm Homes—Beautiful Wisconsin lake region—$75 per A. and up! Favorable terms!
Baker AA-14, St. Croix Falls, Wis.

Real Estate (any kind) bought, sold, traded anywhere. Free information.
Toole's, Box 84, Evansville, Indiana.

Every product advertised in Successful Farming is carried under the guarantee on the index page.

STAMPS AND COINS

Gigantic Collection Free—Includes Triangles—Early United States—Animals—Commemorative—British Colonies—High Value Pictorials, etc. Complete collection plus Big Illustrated Magazine all free. Send 5c for postage. Gray Stamp Co., Dept. SC, Toronto, Canada.

Wow! 203 All Different Germany Zeppelins, Semi-Postals, Airmails, High Values, Big bargain lists and approvals included.
Jamestown Stamp, Jamestown 533, N. Y.

$10.00 for certain Lincoln pennies, Indianheads $50.00. Send 10c for Booklet listing prices paid.
Lincoln Coins, D-342, Glendale, Arizona.

Free Valuable Mystery Gift. Approvals. (Be handling please).
Raymax, 37-FF Maiden Lane, NYC 8.

Renew at least six weeks before your present subscription expires.

Ask your

Field Service Man

He stands ready to answer your questions or refer them to *Successful Farming's* expertly staffed Subscribers' Information Bureau.

Make it a point to ask him to show you a copy of *A Better Living From Your Soil*. He can show you how it helps you to do better farming and enjoy better living, how to better profit from your farm, and how future articles in *Successful Farming* will keep you posted on the latest developments in soil care.

SUCCESSFUL FARMING — FIELD SERVICE MAN

70 BREEDS Chickens, geese, ducks, guineas. Pure-bred, hardy, Northern and most profitable. Higher quality baby chicks, eggs and stock. LOW PRICES. In business since 1893. Beautiful Catalog Free.
R. F. NEUBERT Co., Box 26, MANKATO, MINN.

Make BIG MONEY!
RAISE CHINCHILLA RABBITS!
Cash Markets Supplied for Your Production
FREE • Illustrated Booklet • WRITE TODAY!
ROCK HILL RANCH, SELLERSVILLE 6, PA.
World's Largest Breeder of Chinchilla Rabbits

STRAWBERRY PLANTS
Allen's 1954 Berry Book tells best varieties for home and market, and how to grow them. *Free copy. Write today.*
W. F. ALLEN COMPANY
25 Evergreen Ave., Salisbury, Maryland

MORE AND BETTER POTATOES
ActivO is Nature's own way of **energizing** soil for best crop yields with billions of friendly organisms, hormones, vitamins, minerals, BIOTICS. (Users report "Better than fertilizer!") Just apply to seed. More potatoes or your money back. Trial pkg. for 3-6 bu., $1 p'pd. Dealers, or
THE ACTIVO COMPANY, Bridgeton 28, Indiana

★ BURNHAM'S 4-STAR CHICKS
BEST QUALITY—GOOD BREEDING

Per 100 F.O.B.		St. Run	Pullets	Cox
AAA	White Leghorns	11.90	20.90	3.90
AAA	White Rocks	11.90	16.90	10.90
AAA	Austra Whites	11.90	20.90	5.90
AAA	New Hampshires	11.90	16.90	10.90

Order from this ad. Write for Free Catalog
BURNHAM HATCHERY, Box 348-3, CLINTON, MO.

BOOTH CHICKS
FAMOUS FOR TOP EGG PROFITS
Leghorns, Reds, Rocks, New Hamps, Crossbreds, Assorted
$9.90 per 100 up pp.
Get MORE EGGS and TOP PROFITS from our Chicks bred from World's Record Layers. For 35 years one of America's finest trapnest, pedigree breeding farms. Thousands of 300-342 egg Pedigreed Males now mated. Big Discounts on Advance Orders.
WRITE TODAY—Free 4 Color Catalog!
Booth Farms, Box 871, Clinton, Mo.

DUCKLINGS GOSLINGS
Also Broad Breasted Bronze, B. B. White Hollands, U. S. D. A. turkey poults. 4 breeds Baby Chicks. U.S. Approved-Pullorum Clean. Free catalog.
RIDGWAY HATCHERIES, INC.
BOX 245 LA RUE, OHIO

GROW XMAS TREES
Turn idle land to profits by planting fast growing Musser Trees. FREE Christmas Tree Growers Guide tells profit secrets. Write today to Box 23-C.
Buy from Grower Wholesale
MUSSER FORESTS, Inc. INDIANA, PA.

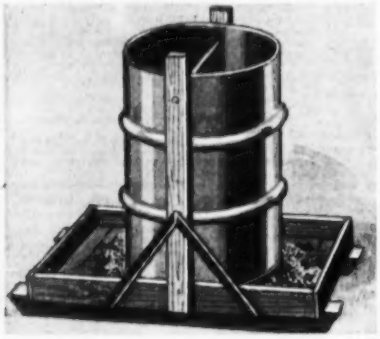
RAISE THE BIG TWO
2
FOR GREATER PROFIT
ROSELAWN LEGHORNS
MORE EGGS—LESS FEED
Raise Roselawn Leghorns and save on feed. Less feed to raise them. Less feed per dozen eggs produced. WRITE FOR FREE FOLDER ABOUT THESE 2 BIG SAVINGS. More long time customers than any other breed or strain.
BROADCROSS WHITES
MORE MEAT—LESS FEED
Raise Broadcross Whites and save on feed. You will be amazed at your meat-feed ratio. Extra fast growing, hybrid vigor, complete feathering, yellow skin, broad breasts, no unsightly pin feathers. NOW HATCHING. WRITE TODAY FOR FREE CATALOG AND REDUCED PRICES.
ROSELAWN POULTRY FARM
R.R. 10S DAYTON (7) OHIO

All around the farm *A page written by our readers*

When installing coil springs that are too strong to stretch by hand, I make the job easier by inserting washers between the coils. If you need about an inch of added length to place the spring, a stack of washers an inch high will do the trick.

I bend the coil spring, insert washers, and when spring is straightened out, it is easy to put in place. Washers can be removed by pliers, or spring can be stretched and they'll drop out.—*C. L. C., South Dakota.*

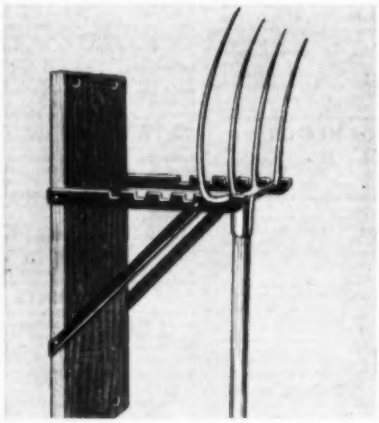
Our portable hog feeder was made by cutting out both ends of a 50-gallon oil drum. I built a box with a flat bot-



tom and sides, then mounted it on a pair of 4"x4" pieces for skid runners (as shown).

I braced an upright on each side and bored holes through it so a pipe passed through uprights and the barrel. The barrel swings with the lower edge a fraction of an inch above the bottom of the box. As the pigs push after feed they move the barrel enough to keep the feed running down. I set this under a shade or shelter to keep rain off feed.—*R. S., Michigan.*

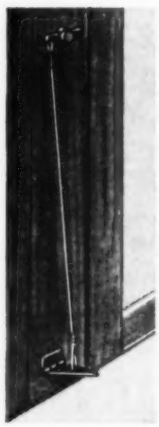
For peeling fence posts, rails, and pulpwood, we think a slat-type tile spade with a keen cutting edge is the quickest and easiest tool to use.—*G. E. C., Minnesota.*



We hang pitchforks where they will be handy—yet safe—by making racks (as shown). They work fine. The notches are deep so forks can't easily be knocked down.—*L. G., Wisconsin.*

Our tractor fuel line wouldn't hold because of vibration. I fixed this by connecting a short, flexible fuel line to the regular copper tubing, which I coiled enough to make up for the extra length. It required no cutting or special fitting, and has eliminated fuel-line trouble.—*C. B., Michigan.*

To operate turn latches with the foot, I fasten a strap hinge about 6 inches from bottom of door (as shown). One leaf of the hinge is secured to the door and the other leaf swings free.



I fasten a length of picture wire or strong cord to one end of the latch handle, the other to the hinge leaf in horizontal position. Even with both hands occupied, the latch can be released.—*H. R., Pennsylvania.*

Bolting a horseshoe to each harrow section makes them easier to lift when cleaning out trash. Shoe serves as handle. Nail-holes in horseshoe are enlarged for fastening shoe to harrow bar.—*E. W. L., Michigan.*

To protect my flashlight when I carry it in the tool box, I cut a slit in a rubber ball, then slip it over the flashlight lens.—*R. C., Illinois.*

When digging postholes in heavy clay or gumbo, I carry along a pail of crankcase drainings. Every so often I dip the posthole digger in the oil, and have less trouble with the clay sticking to the digger.—*P. W. U., Minnesota.*

We made a saddle rack by welding legs of $\frac{3}{8}$" steel rod on a 100-pound grease drum (as shown). This has

proved very satisfactory. Removing the head from one end of the drum gives us handy storage space for small items.—*R. A. R., Texas.*

When starting plants in hotbed flats, we use a salt or pepper shaker. The amount of seed for one flat can be measured into shaker for very even planting. The pepper shaker is especially helpful for very small seeds such as petunia.—*Mrs. E. L., New York.*

Drawings: Associated Artists

Successful Farming **invites you to share your ideas with the rest of our readers. We pay $5 for each item upon publication, but regret we cannot return those we don't use.** —*The Editors*

In the Face of Adverse Weather, 5038 Farmers Average 101.16 Bushels of DEKALB CORN per acre

DEKALB CORN has been MORE instrumental in increasing the farm wealth of America than any other single product. Every year, MORE and MORE farmers are depending upon DEKALB for seed corn that's bred to mature and yield in their proper growing zones. Look at the map figures. They are state averages of ALL DEKALB yields* made by farmer contestants in the 1953 National DEKALB Corn Growing Contest. They were made on typical farms, under average field conditions, not on specially "coddled garden plots." The National average last year of 5038 DeKalb Contest growers, was 101.16 bushels per acre. And, during 15 straight years of DEKALB contests, 52,306 farmers have made an outstanding average yield of 99.04 bushels* of DEKALB CORN per acre. American farmers have had security—year after year, from profitable yields of DEKALB CORN. That's one good reason why you should plant DEKALB in 1954.

For 14 straight years

More Farmers have Planted DEKALB *than any other Seed Corn*

DEKALB AGRICULTURAL ASSOCIATION, INC.
DEKALB, ILLINOIS
Commercial Producers & Distributors of DeKalb Seed Corn & DeKalb Chix

FIRST in RESEARCH · FIRST in SALES · FIRST in RESULTS!

Detergents, soaps, she tried them all
And wasn't satisfied . . .
But now his shirts are dazzling clean!
Smart girl . . . she turned to Tide!

Sooner or later almost everyone turns to *Tide*

— FOR CLEAN, CLEAN CLOTHES!

No washday soap-no other detergent known—

NOTHING ELSE WILL WASH AS CLEAN AS *TIDE* - yet is so mild!

NOTHING ELSE BEATS *Tide* FOR GETTING CLOTHES CLEAN!

Tests against every known kind of soap and detergent *prove* this over and over again! Until Tide was invented, it wasn't *possible* to get your family wash so clean. And today's Tide has even *more* cleaning power. *More* mildness, too. No wonder Tide outsells any other washing product by *millions* of boxes!

NOTHING ELSE BEATS *Tide* FOR GETTING CLOTHES WHITE!

Never before Tide, was it possible to get your wash so *white*. And today's Tide has an even *greater* whitening power that gets clothes even more *dazzling* white. It's truly amazing! Get Tide today—there's *nothing* like it! (Tide is made by an exclusive *patented* formula.)

RECOMMENDED FAVORITE FOR AUTOMATIC WASHERS!

Tide is recommended by 25 leading manufacturers for their automatic washers . . . because they want the machine you buy to perform its *best*. No matter which of these automatics *you* own, remember *this!* No washday soap, no other detergent known—*nothing* else will wash as clean as Tide, yet is so mild!

More women by far use TIDE than any other washing product in the world.

Guaranteed by Good Housekeeping